

TOWN OF ERIE
BOARD OF TRUSTEES REGULAR MEETING ¹
Tuesday, December 9, 2014
6:30 p.m.
Board Room, Erie Town Hall, 645 Holbrook Street, Erie, CO 80516

STUDY SESSION 5:45 P.M. COMMUNITY ROOM

I. CALL MEETING TO ORDER

II. PLEDGE OF ALLEGIANCE AND ROLL CALL

III. APPROVAL OF THE AGENDA

IV. CONSENT AGENDA (The consent agenda is intended to contain items that are prepared to be decided without discussion. Any Board member may request removal of any item they do not want to consider without discussion or wish to vote no on, without jeopardizing the approval of other items on the consent agenda. Items removed will be placed under IX. General Business, a. in the order they appear on the Agenda.) (This should be done prior to the motion to approve.)

- a. Approval of the November 11, 2014 Meeting Minutes
- b. Approval of the November 18, 2014 Special Meeting Minutes

V. PUBLIC COMMENT (This agenda item provides the public an opportunity to discuss items other than ordinances on second reading, public hearings and consent agenda items that are not on the agenda. The Board of Trustees is not prepared to decide on matters brought up at this time, but if warranted, will place them on a future agenda.)

VI. PROCLAMATIONS AND PRESENTATIONS (This agenda item is intended to contain Presentations to the Board that do not require any Board action. Presentations are limited to fifteen (15) minutes.)

NONE SCHEDULED

VII. RESOLUTIONS (This agenda item is for all matters that should be decided by resolutions.)

- a. Resolution 14-134; A Resolution Approving the 5th Amendment to the Bridgewater Annexation Agreement to Include a Traffic Signal
- b. Resolution 14-135; A Resolution Awarding a Contract for the Installation of Locate Wires for Fiber Conduit to the North Water Reclamation Facility
- c. Resolution 14-136; A Resolution Awarding a Design Contract for Coal Creek Improvements
- d. Resolution 14-137; A Resolution Awarding a Design Contract for Boulder Creek Improvements
- e. Resolution 14-138; A Resolution Approving the Purchase of Police Equipment

¹ FOR MORE INFORMATION ON THE AGENDA ITEMS LISTED OR FOR INDIVIDUALS WITH DISABILITIES NEEDING AUXILIARY AIDS OR TO REQUEST ASSISTANCE, PLEASE CONTACT THE TOWN CLERK'S OFFICE AT 645 HOLBROOK STREET, P.O. BOX 750, 303-926-2731.

RESOLUTIONS (continued)

- f. Resolution 14-139; A Resolution Approving the Tenth Interim Agreement With the Northern Colorado Water Conservancy District, Northern Integrated Supply Project Water Activity Enterprise, For Participation in the Northern Integrated Supply Project
- g. Resolution 14-140 ; A Resolution Authorizing The Town Of Erie, Colorado, To Enter Into A Third Amendment To Employment Agreement With Arthur J. Krieger; Authorizing And Directing The Appropriate Town Officers To Sign Said Third Amendment To Employment Agreement

PUBLIC HEARING

(Public Hearing continued from the November 18, 2014 Special Meeting)

- h. Resolution 14-131; A Resolution Establishing and Certifying the Property Taxes for the Town of Erie, Colorado in Weld and Boulder Counties for the Year 2015

CLOSE PUBLIC HEARING

VIII. ORDINANCES (To adopt an Ordinance of the First Reading, a Motion/Second/Approval is required to suspend Resolution 02-44 and adopt the Ordinance on the First Reading.)

- a. Ordinance 38-2014; An Ordinance Of The Town Of Erie, Colorado Approving An Option To Purchase Agreement By And Among Brothers Redevelopment, Inc., The Town Of Erie And The Erie Housing Authority Providing For The Transfer Of All Assets Of The Erie Housing Authority And The Transfer Of Certain Real Property From The Town Of Erie To Brothers Redevelopment, Inc.; And, Declaring an Emergency Therefore. **(SECOND READING)**

IX. GENERAL BUSINESS (This agenda item is reserved for matters that are ready for Board action, and do not fit into other categories, i.e. resolutions, ordinances...)

- a. Sierra Vista Sketch Plan Presentation
- b. Airport Master Plan Working Paper #1

X. STAFF REPORTS (This agenda item is reserved for specific items from Staff requiring Board direction or just relaying important information.)

Staff Reports Included in Agenda Packet

XI. BOARD OF TRUSTEES REPORTS & APPOINTMENTS (This agenda item is for all Board of Trustees reports, Board & Commission Appointment, and items of information as well as Board discussion items, not listed on the agenda.)

- a. BOT Reports

XII. ADJOURNMENT (The Board's Goal is that all meetings be adjourned by 10:30pm. An agenda check will be conducted at or about 10:00 p.m., and no later than at the end of the first item finished after 10:00 p.m. Items not completed prior to adjournment will generally be taken up at the next regular meeting.)

TOWN OF ERIE
BOARD OF TRUSTEES REGULAR MEETING 1
Tuesday, November 11, 2014
6:30 p.m.
Board Room, Erie Town Hall, 645 Holbrook, Erie, CO 80516

I. CALL MEETING TO ORDER

Mayor Harris called the November 11, 2014 Regular Meeting of the Board of Trustees to order at 6:30 p.m.

II. PLEDGE OF ALLEGIANCE AND ROLL CALL

Roll Call:	Trustee Carroll	Present
	Trustee Schutt	Present
	Mayor Pro Tem Gruber	Present
	Trustee Moore	Present
	Trustee Charles	Present
	Trustee Woog	Present
	Mayor Harris	Present

III. APPROVAL OF THE AGENDA

Action: Trustee Moore moved to approve the November 11, 2014 agenda with the amendment of adding item e. to Proclamations and Presentations, a Veterans Day Proclamation; the motion was seconded by Trustee Schutt. The motion carried with all present voting in favor thereof.

IV. CONSENT AGENDA

a. Approval of the October 28, 2014 Meeting Minutes

Action: Mayor Pro Tem Gruber moved to approve the November 11, 2014 Consent Agenda; the motion was seconded by Trustee Charles. The motion carried all present voting in favor thereof.

V. PUBLIC COMMENT

The following people spoke against allowing retail marijuana sales in the Town of Erie:

Louis Meskars, 1933 Spruce Court, Erie, Co.
Floyd Kellerr, 1927 Lodgepole Drive, Erie, CO.
David Cummings, 1636 Alpine Drive, Erie, CO.
Jeremy Stowell, 2284 Alpine Drive, Erie, CO.
Kerry Bensmal, 1007 Sumner Way, Erie, CO.
M. Riley, 345 Briggs Street, Erie, CO.
K. Riley, 345 Briggs Street, Erie, CO.
Cameron Rake, 2980 Piper Lane, Erie, CO.
Cameron Asey, 1926 Alpine, Drive, Erie, CO.

VI. PROCLAMATIONS AND PRESENTATIONS

- a. **Optimist Club Award** was presented to the Town of Erie for their sponsorship of the Annual Erie Erie Run.
- b. **National Adoption Day**-Mayor Harris proclaimed November 21, 2014 as National Adoption Day in Erie.
- c. **STAR Awards**

Jan Sloat, Human Resource Manager presented this award. Paula Mehle and Katie Jenkins are being recognized for demonstrating exceptional service and performance for work completed on behalf of the Town. Each will receive the award for Outstanding Achievement. In 2012, the Town of Erie Board of Trustees identified participation in the International Council of Shopping Centers (ICSC) as a priority in order to attract retail businesses to Erie. RECon is the largest industry convention, making it an unparalleled opportunity for the Town of Erie to do a year's worth of business in just four days! In 2013, the Town's Economic Development Coordinator Paula Mehle and Communications & Marketing Coordinator Katie Jenkins launched an ICSC marketing campaign that included creating a customized mobile app; designed a convention exhibit booth; designed a vivid background graphic display; and designed placement of a full page ad in the RECon Program Directory. Paula and Katie's efforts resulted in over three times as many meaningful meetings with retailers and commercial brokers compared to 2012. Last year the economic development mobile applications was awarded 3CMA's highest honor – the President's award for Most Outstanding Marketing Program in addition to two SAVVY Awards and one Silver Circle Award. This year, the Town received a Silver Excellence in Economic Development Award for its 2014 project in the category of New Media from the International Economic Development Council (IEDC). Paula and Katie work behind the scenes week in and week out in support of the Town's overall economic development goals. Thanks to their efforts, Erie's profile within the retail development community has been dramatically heightened. It is only fitting that they be publicly recognized for their efforts. Recipients of the STAR Award are recognized at regularly scheduled Town Board meetings by the Mayor and Board of Trustees and are presented with the STAR Award and a Town inspired t-shirt. Recipients of this awarded will also have their name added to the STAR Award plaque hanging in the Board Room at Town Hall.

d. Economic Development Award

The International Economic Development Council (IEDC) awarded the Town of Erie a Silver Excellence in Economic Development Award for its 2014 project in the category of New Media for communities with populations of less than 25,000. Town of Erie Economic Development Coordinator Paula Mehle accepted the honor on behalf of the Town at awards during the IEDC Annual Conference, which was held in Fort Worth, Texas. IEDC's Excellence in Economic Development Awards recognizes the world's best economic development programs and partnerships, marketing materials, and the year's most influential leaders. These awards honor organizations and individuals for their efforts in creating positive change in urban, suburban, and rural communities.

VII. RESOLUTIONS

- a. **Resolution 14-125; A Resolution Approving the Seventh Amendment to the Fourth Interim Agreement with Northern Colorado Water Conservancy District Windy Gap FIRMING Project and the Town of Erie for Participation in The Windy Gap FIRMING Project**

RESOLUTIONS (continued)

Gary Behlen, Director of Public Works, presented Staff recommendations for the approval of Resolution 14-125. The Board of Trustees previously approved agreements with the Municipal Sub-district, Northern Colorado Water Conservancy District on July 23, 2002, February 11, 2003, August 10, 2004, January 24, 2006, December 11, 2007, June 9, 2009, June 22, 2010, January 10, 2012, August 28, 2012 and March 25, 2014 to participate in the Windy Gap Firming Project. The Town is currently operating under the Seventh Amendment to the Fourth Interim Agreement with the Municipal Sub-district, Northern Colorado Water Conservancy District, acting by and through its Windy Gap Firming Project Water Activity Enterprise (Fourth Interim Agreement), effective March 25, 2014. The Town of Erie owns 14 units of Windy Gap water and has planned to purchase up to an additional 6 units. Windy Gap water is desirable for the Town of Erie because the water is fully consumable (available for total consumptive use, reuse, sale of effluent, etc.) and because it is deliverable through the existing Northern Colorado Water Conservancy District (NCWCD) Southern Water Supply Pipeline Project and the Town of Erie's pipeline. The Windy Gap Firming Project has always been contemplated as a component of the Windy Gap Project. It is necessary in order to provide additional storage to firm the annual yield of the Windy Gap water rights. The first, second, and third phases of the Windy Gap Firming Project are essentially complete. The work completed to date includes preliminary studies to evaluate potential reservoir sites, engineering and environmental studies, and alternatives analysis, completion of the Draft Environmental Impact Statement (DEIS) and the Final Environmental Impact Statement. The remaining work in the fourth phase of the Project in 2014 consists of remaining environmental and permitting tasks, contracting with the U.S. Bureau of Reclamation and other obligations related to mitigation and environmental enhancement for the Project. The Chimney Hollow Reservoir site was acquired in 2004 for approximately \$4,000,000. Erie's total pro rata share of the continuation of work in 2014 totaled \$139,243, of which it has paid \$68,823 to date. The remaining \$70,420 is due and owing under the Fourth Interim Agreement. Staff recommends the Board of Trustees authorize the payment of the remaining \$70,420 due and owing under the Fourth Interim Agreement for continued participation in Phase Four of the Windy Gap Firming Project.

Action: Mayor Pro Tem Gruber moved to approve Resolution 14-125; the motion was seconded by Trustee Schutt. The motion carried with the following roll call vote:

Trustee Carroll	Yes
Trustee Charles	Yes
Mayor Pro Tem Gruber	Yes
Trustee Moore	Yes
Trustee Woog	Yes
Trustee Schutt	Yes
Mayor Harris	Yes

b. Resolution 14-126; A Resolution Awarding a Design Contract for Weld County Road 5 Repair

Gary Behlen, Director of Public Works, presented Staff recommendations for the approval of Resolution 14-126. On September 16, 2011, the Town received notification that the Special Highway Committee is accepting applications for bridge funds for rehabilitation or replacement of substandard bridges. The funding requires the Town of Erie to fund a minimum of 20% of the project cost, with Federal funding for the remaining 80%. On November 7, 2011 the Town was informed that the Town's application for funding the rehabilitation of the County Road 5 Bridge over the Sullivan Ditch was approved. The funding was scheduled for Fiscal year 2014. The funds will be administered through

RESOLUTIONS (continued)

the Colorado Department of Transportation (CDOT). Town Staff has worked with CDOT Staff to create the Inter-Governmental Agreement for **Project: CR5 at Sullivan Ditch (19743) (BRO M400-007)**. At the August 26, 2014 Town of Erie Board of Trustees meeting Resolution 14-96, A resolution accepting Federal Funds in the amount of \$159,000 for a bridge rehabilitation project, was approved. The Colorado Department of Transportation (CDOT) signed the agreement on September 18, 2014. The Town received the signed agreement from CDOT on September 29, 2014. Town staff prepared a Request for Qualifications for the WCR 5 Bridge Repair design and posted it on the Town Web site on October 3, 2014. The invitation to submit qualifications was advertised in the Denver Post on October 4, 2014. Town Staff held a Pre-Qualification Meeting on October 10, 2014; six consulting firms were in attendance at the Pre-Qualification Meeting. Qualifications were due October 24, 2014. One consultant; J-U-B Engineers, Inc. submitted qualifications, due to Federal Funding requirements for this project, a Fee Proposal is not allowed to be submitted with the Qualification submittal. The consultant must be selected based on qualifications only, then the Town and Consultant negotiates the design fees. Town Staff reviewed J-U-B Engineers, Inc., qualification's, and found the firm to be very qualified to provide the services required for a Federally Funded bridge repair project. Town Staff negotiated the final scope and design fee of \$30,310.

Action: Trustee Moore moved to approve Resolution 14-126; the motion was seconded by Trustee Schutt. The motion carried with the following roll call vote:

Trustee Moore	Yes
Trustee Woog	Yes
Trustee Carroll	Yes
Trustee Charles	Yes
Trustee Schutt	Yes
Mayor Pro Tem Gruber	Yes
Mayor Harris	Yes

c. **Resolution 14-127; A Resolution Approving an Intergovernmental Agreement Between the Town of Erie and Erie Highlands Metropolitan District Nos. 1 Through 5.**

Marty Ostholthoff, Director of Community Development presented staff recommendations for the approval of Resolution 14-127. The Town previously approved the Service Plan (Plan) for Erie Highlands Metropolitan District Nos. 1-5 (Districts) in September 2013. The Districts encompasses approximately 305 acres of land at the southwest corner of Erie Parkway and Weld County Road 5 upon which the Erie Highlands subdivision is currently being constructed. In accordance with the approved Plan and Title 9-4-6 of the Town of Erie Municipal Code, the Town requires the Districts to enter into an Intergovernmental Agreement (IGA) with the Town ensuring compliance with approved Plan and the Erie Municipal Code.

Action: Mayor Pro Tem Gruber moved to approve Resolution 14-127; the motion was seconded by Trustee Schutt. The motion carried with all present voting in favor thereof.

VIII. ORDINANCES

- a. **Ordinance 33-2014; An Ordinance of the Town Of Erie, Colorado Rezoning the Sierra Vista Property Pursuant to the Petition of the Owner Thereof, from HR – High Density Residential and CC – Community Commercial to LR – Low Density Residential and CC – Community Commercial; and Providing for the Effective Date of this Ordinance; and Setting Forth Details in Relation Thereto**

Todd Bjerkaas, Planner, presented staff recommendations for the approval of Ordinance 33-2014. Staff finds the application in compliance with the Rezoning approval criteria and recommends the Board of Trustees approve the Sierra Vista Rezoning application by approving Ordinance 33-2014 at the Second Reading on Tuesday, October 14, 2014. The Planning Commission held a public hearing for the Rezoning request on September 3, 2014. The Planning Commission recommended approval of the Rezoning by approving Resolution P14-17, with the following conditions: Technical corrections to the Sierra Vista Zoning Map shall be made to the Town's satisfaction.

Action: Following a presentation by the applicant and Board of Trustee discussion; Trustee Charles moved to approve Ordinance 33-201; the motion was seconded by Trustee Schutt. The motion carried with a six (6) for and one (1) against with Trustee Moore voting no.

Action: Mayor Harris called for a break at 8:45 p.m., and reconvened the meeting at 8:50 p.m.

- b. **Ordinance 35-2014; An Ordinance of the Town Of Erie, Colorado Extending Until December 31, 2015 the Existing Moratorium on the Submission, Acceptance, Processing and Approval of Applications and the Licensing, Permitting, Establishment or Operation of Any Recreational Marijuana Business That Sells, Cultivates, Manufactures, Prepares, Packages, Purchases, Tests, or Otherwise Provides For Or Allows For The Use Of Marijuana Or Marijuana Products Pursuant to Amendment 64 Approved by the Voters of the State of Colorado at the November 6, 2012, General Election, and Codified as Article XVIII, Section 16 of the Colorado Constitution; and Declaring an Emergency Therefore.**

As the Town's current Moratorium on recreational marijuana businesses ends December 31, 2014 the Board of Trustees must quickly decide on its course of action regarding recreational marijuana businesses. At the October 28, 2014 the Board gave direction to extend this Moratorium for one year. Given the time constraints imposed by the expiration of the current Moratorium it is necessary to pass Ordinance 35-2014 extending the current Moratorium on an emergency basis in order to keep it in force. The Moratorium extension ordinance or the Moratorium itself will not alter or affect the rights of an individual 21 years of age or older to use, possess and grow a limited amount of marijuana as guaranteed by Amendment 64. As mentioned, given the severe time limitation faced by the Board of Trustees, it would be difficult if not impossible to draft, discuss, analyze and adopt any comprehensive Code regulations allowing marijuana businesses by the December 31, 2014 deadline. Given these facts, and the fact that the Board of Trustees has not yet had an opportunity to discuss this issue and vote on recreational marijuana businesses, it is clear that more time is needed for this process. The extension of the Moratorium will provide the Board of Trustees the additional time needed to make these important decisions.

Action: Mayor Pro Tem Gruber moved to suspend Resolution 02-44 and pass Ordinance 35-2014 as an emergency and on a first reading; the motion was seconded by Trustee Schutt. The motion carried with all present voting in favor thereof.

ORDINANCES (continued)

Action: Trustee Charles moved to approve Ordinance 35-2014 on an emergency first reading; the motion was seconded by Trustee Moore. The motion carried with all present voting in favor thereof.

- b. **Ordinance 36-2014; An Ordinance Of The Town Of Erie, Colorado, Amending Title 2, "Revenue And Finance," Chapter 10, "Fee Schedule," Section 4, "Public Works Fees," And Section 6, "Building Permit And Other Fees," Of The Erie Municipal Code; Adopting New Water, Wastewater And Storm Drainage Rates And Fees In Conformance With The Water, Wastewater and Storm Drainage Rate Studies Commissioned And Adopted By The Town; And, Setting Forth Details In Relation Thereto.**

Steve Felten, Director of Finance presented staff recommendations for the approval of Ordinance 36-2014. The Town of Erie Financial Policies requires the Town to have a formal rate study performed on the Water and Wastewater Enterprise Funds at least every five years. The last formal rate study for these funds was conducted in 2008. In 2008, the Board reviewed and adopted the results of those rate studies, setting rates and fees for the period 2009-2013. During 2013, the Town contracted with Willdan Financial Services/Red Oak Consulting ("Willdan") to perform the formal rate study for the Water and Wastewater Funds pursuant to policy. In 2014 staff recommended that the rate study be expanded to include the Storm Drainage Operating Fund, which has not had a rate increase since 2004. The results of the studies were presented to the Board by Willdan and staff and discussed with the Board at study sessions on August 26, 2014 and September 30, 2014. As a result of these study sessions, the Board asked staff to present the results in the form of an ordinance at the October 28, 2014 meeting for the Board's consideration. The assumptions and results of the Water, Wastewater and Storm Drainage Rate Studies are discussed below.

Water Enterprise Fund Rate Study

The goals of the rate study are to determine the revenue needed to cover annual operations and maintenance costs and capital improvement projects, meet debt service requirements, provide for sufficient operating reserves and maintain the utility's self-sufficiency over a 5-year period.

The rate study for the Water Enterprise Fund included the following assumptions:

Residential growth: 400 taps per year

Target Reserves: 90 days of operations

Debt Service Coverage: 1.1x (net revenues divided by annual debt service payment)

The Water Rate Study provides recommendations for changes in the tap fee, the fee in lieu of water dedication (sometimes referred to as the water rights fee) and user rates in order to meet the goals of the study.

Water Tap Fee and Fee in Lieu of Water Dedication: These fees are collected on all new residential and non-residential construction that requires connection to the water system. These fees are a one-time charge to the customer for their proportional share of capacity of the system infrastructure in the case of the water tap fee and annual water requirements in the case of the fee in lieu of water dedication. These fees are used to defray the capital costs of expanding the system facilities and to recover the cost of growth to the system. Below is a schedule of current and proposed water tap fee and fee in lieu of water dedication.

ORDINANCES (continued)

Meter Size	Water Tap Fee		Fee in Lieu of Water Dedication	
	Current	Proposed	Current	Proposed
3/4 inch	\$ 8,680	\$ 10,416	\$ 12,850	\$ 15,300
1 inch	14,470	17,360	(a)	(a)
1 1/2 inch	28,930	34,720	(a)	(a)
2 inch	46,290	55,552	(a)	(a)
3 inch	86,800	104,160	(a)	(a)
4 inch	144,670	173,600	(a)	(a)
6 inch	289,330	347,200	(a)	(a)

(a) Section 8-1-9 of the code defines the manner in which the Town determines the amount of fee in lieu of water dedication

The rate study further recommended that the water tap fee have annual increases for 2016-2019, as follows:

Meter Size	Water Tap Fee				
	2015	2016	2017	2018	2019
3/4 inch	\$ 10,416	\$ 11,582	\$ 12,748	\$ 13,914	\$ 15,080
1 inch	17,360	19,303	21,247	23,190	25,133
1 1/2 inch	34,720	38,607	42,493	46,380	50,267
2 inch	55,552	61,771	67,989	74,208	80,427
3 inch	104,160	115,820	127,480	139,140	150,800
4 inch	173,600	193,033	212,467	231,900	251,333
6 inch	347,200	386,067	424,933	463,800	502,667

Water User Rates: The rate study develops a financial plan and a cost of providing water service to its customers. The financial plan identifies the revenues and expenses over the study period and determines if the current rates generate the revenue necessary to cover operating costs, debt service payments, capital improvement projects, reserve requirements and provide the necessary revenue to meet bond covenants.

The study also develops the cost of service by customer class (residential, commercial and irrigation) and it recognizes the differing service characteristics based on the meter size and service demands. Based on the cost of service information, the study recommends a revised rate structure for water service that includes a monthly service charge and volumetric charge. In addition, the rate study recommended the establishment of an additional customer class – multi-family.

Below are the current (2014) user rates and the proposed user rates for the next five years. No increase is being proposed for the residential monthly service charge for 2015 for customers with a ¾ inch meter size, which includes all but approximately 50 residential customers. The monthly service charge for all other meter sizes will be increased 5% in 2015. In subsequent years the monthly service charge for all meter sizes will increase in line with the overall revenue requirements as determined in the rate study – 2016 +5%, 2017 +5%, 2018 +4% and 2019 +3%. The new multi-family class will be charged the same monthly service charge as the residential class. Commercial and irrigation monthly service charges will increase as follows: 2015 +5%, 2016 +5%, 2017 +5%, 2018 +4% and 2019 +3%.

ORDINANCES (continued)

Meter Size	Water Monthly Service Charge - Residential & Multi-Family					
	Current	Proposed	Proposed	Proposed	Proposed	Proposed
	2014	2015	2016	2017	2018	2019
3/4 inch	\$ 25.41	\$ 25.41	\$ 26.68	\$ 28.01	\$ 29.13	\$ 30.00
1 inch	25.41	26.68	28.01	29.41	30.59	31.51
1 1/2 inch	34.78	36.52	38.35	40.27	41.88	43.14
2 inch	56.94	59.79	62.78	65.92	68.56	70.62
3 inch	68.20	71.61	75.19	78.95	82.11	84.57

Meter Size	Water Monthly Service Charge - Commercial & Irrigation					
	Current	Proposed	Proposed	Proposed	Proposed	Proposed
	2014	2015	2016	2017	2018	2019
3/4 inch	\$ 25.41	\$ 26.68	\$ 28.01	\$ 29.41	\$ 30.59	\$ 31.51
1 inch	25.41	26.68	28.01	29.41	30.59	31.51
1 1/2 inch	34.78	36.52	38.35	40.27	41.88	43.14
2 inch	56.94	59.79	62.78	65.92	68.56	70.62
3 inch	68.20	71.61	75.19	78.95	82.11	84.57
4 inch	68.20	71.61	75.19	78.95	82.11	84.57
6 inch	68.20	71.61	75.19	78.95	82.11	84.57

Monthly volume charges will increase as follows for residential and multi-family customers. 2015 Block 1 +2.7%, Block 2 +2.6%, Block 3 +23.3% and Block 4 +23.3%. Blocks 3 and 4 were increased to incent water conservation. In 2016-2019 each block will increase as follows: 2016 +5%, 2017 +5%, 2018 +4% and 2019 +3%. Commercial and irrigation volume rates increase by the same percentages as the monthly service charges.

Usage Block	Gallons Used	Water Monthly Volume Charge per 1,000 Gallons - Residential & Multi-Family					
		Current	Proposed	Proposed	Proposed	Proposed	Proposed
		2014	2015	2016	2017	2018	2019
Block 1	0 - 5,000	\$ 3.65	\$ 3.75	\$ 3.94	\$ 4.14	\$ 4.31	\$ 4.44
Block 2	5,001 - 10,000	4.56	4.68	4.91	5.16	5.37	5.53
Block 3	15,001 - 25,000	5.70	7.03	7.38	7.75	8.06	8.30
Block 4	Over 25,000	8.55	10.54	11.07	11.62	12.08	12.44

Customer Class	Gallons Used	Water Monthly Volume Charge per 1,000 Gallons - Commercial & Irrigation					
		Current	Proposed	Proposed	Proposed	Proposed	Proposed
		2014	2015	2016	2017	2018	2019
Commercial	All Usage	\$ 5.73	\$ 6.02	\$ 6.32	\$ 6.64	\$ 6.91	\$ 7.12
Irrigation	All Usage	6.03	6.33	6.65	6.98	7.26	7.48

ORDINANCES (continued)

The average residential customer uses about 8,500 gallons of water monthly on an annual basis, of which about 4,500 gallons represents irrigation consumption and 4,000 represents interior consumption. For this average customer, these rates represent an increase in 2015 of approximately \$1.50, or 2.7%, per month. For all customers, the average increase will be approximately \$2.02, or 4.0%, per month. Increases in 2016 through 2019 will be 5.0%, 5.0%, 4.0% and 3.0%, respectively.

Wastewater Enterprise Fund Rate Study

The goals of the rate study are to determine the revenue needed to cover annual operations and maintenance costs and capital improvement projects, meet debt service requirements, provide for sufficient operating reserves and maintain the utility's self-sufficiency over a 5-year period.

The rate study for the Wastewater Enterprise Fund used the following assumptions:

Residential growth: 400 taps per year

Target Reserves: 90 days of operations

Debt Service Coverage: 1.1x (net revenues divided by annual debt service payment)

The Wastewater Rate Study provides recommendations for changes in the tap fee to meet the goals of the study. No change to monthly user rates is required.

Wastewater Tap Fee: The tap fee is collected on all new residential and non-residential construction that requires connection to the wastewater system. The fee is a one-time charge to the customer for their proportional share of capacity of the system infrastructure. The fee is used to defray the capital costs of expanding the system facilities and to recover the cost of growth to the system. Below is a schedule of current and proposed wastewater tap fees.

Meter Size	Wastewater Tap Fee	
	Current	Proposed
3/4 inch	\$ 4,290	\$ 5,200
1 inch	7,150	8,667
1 1/2 inch	14,300	17,333
2 inch	22,880	27,733
3 inch	42,900	52,000
4 inch	71,500	86,667
6 inch	143,000	173,333

Storm Drainage Operating Fund Rate Study

The Town currently charges a monthly \$5.00 fee to all customer classes to support the operations of the Storm Drainage Operating Fund. This fee has not changed since 2004 and is not adequate to support operations and future capital needs. In addition, most municipalities assess storm drainage fees based on the amount of impervious square footage the customer has rather than charging a flat fee. As a result, the rate study recommended changing the rate structure to assess a monthly fee based on the impervious square footage. The proposed monthly fee basis will be established at \$5.41 per Single Family Residential Equivalent (SFRE) for 2015. Based on analysis performed in the rate study it was determined that the average single family residence in Erie has approximately 5,300 square feet of impervious square footage (which includes the house, driveways, sidewalks and similar surfaces), defined as an SFRE. All single-family residences will be charged the same monthly fee - \$5.41 for 2015. Commercial customers will be charged on the basis of how many SFRE's their property has and billed on that basis. For example, if a commercial customer has 15,900 square feet of impervious area, they will be billed \$16.23 per month in 2015 (15,300 square feet divided by 5,300 square feet = 3 times

ORDINANCES (continued)

\$5.41/SFRE = \$16.23). The average commercial customer will be charged approximately \$45.00 per month in 2015 as a result of the rate study recommendation. The proposed rate per SFRE is as follows:

	Storm Drainage Monthly Charge per Single Family Equivalent (SFRE)					
	Current (a)	2015	2016	2017	2018	2019
Rate per SFRE	\$ 5.00	\$ 5.41	\$ 6.60	\$ 8.05	\$ 9.82	\$ 11.98

(a) Current charge is a flat rate for all customer classes.

As a result of this proposed change, irrigation customers will no longer be charged a monthly storm drainage fee. Multi-family customers will be charged at the same rate as a single-family residence.

Summary

As a result of the above recommended changes, the "average" residential customer would see average water, wastewater and storm drainage monthly charges approximating the following:

	Water	Waste water	Storm	Total	\$ Change	% Change
2014	\$ 56.50	\$ 48.48	\$ 5.00	\$ 109.98		
2015	58.00	48.48	5.41	111.89	1.91	1.7%
2016	60.90	48.48	6.60	115.98	4.09	3.7%
2017	63.95	48.48	8.05	120.48	4.50	3.9%
2018	66.51	48.48	9.82	124.81	4.33	3.6%
2019	68.51	48.48	11.98	128.97	4.16	3.3%

Action: Trustee Carroll moved to approve Ordinance 36-2014; the motion was seconded by Trustee Schutt. The motion carried with a Five (5) for and two (2) against vote, with Trustees Charles and Woog voting no.

d. Ordinance 38-2014; An Ordinance Of The Town Of Erie, Colorado Approving An Option To Purchase Agreement By And Among Brothers Redevelopment, Inc., The Town Of Erie And The Erie Housing Authority Providing For The Transfer Of All Assets Of The Erie Housing Authority And The Transfer Of Certain Real Property From The Town Of Erie To Brothers Redevelopment, Inc.; And, Setting Forth Details In Relation Thereto.

Steve Felten presented staff recommendations for the approval of Ordinance 38-2014. The Town established the Erie Housing Authority (EHA) in 1999 and built a 12-unit senior housing complex in 2001. From January 2002 through November 2012 the complex was managed by the Boulder County Housing Authority. Since then the property has been managed by Pilla Management, a partner of Brothers Redevelopment, Inc. (BRI) Small housing authorities do not enjoy the same economies of scale experienced by larger authorities. As a result of this and other factors, the Town's housing authority has never had positive cash flow. In addition, the Town does not have the staff to properly manage and operate a housing authority that receives federal rent subsidies. As a result, the Town is working with BRI to expand the number of units and ultimately transfer ownership of the property to BRI. BRI plans to finance the acquisition of authority-related assets with funds from either or both of the Colorado Housing and Finance Authority (CHFA) or the State of Colorado Division of Housing (DOH). Earlier in 2014 BRI

ORDINANCES (continued)

submitted applications for an allocation of Low Income Housing Tax Credit (LLLITC) in both rounds for the 2014 allocation year. Allocation of these credits is a competitive process, with two rounds of applications each year. BRI was unsuccessful in both application rounds in obtaining an LLLITC allocation, but CHFA staff encouraged BRI to pursue an alternative plan that would allow for the full planned expansion in one phase, with an alternative financing plan that would potentially include funding from both CHF A and the DOH. BRI is in the process of exploring project and financing plans to pursue these potential options, which will have application deadlines on various dates during 2015. Under any of these financing scenarios, BRI is required to show that it either owns or has the right to acquire the property underlying the applications. To fulfill this requirement for the previous LLLITC applications, on February 25, 2014 the Board approved entering into an option agreement providing for the transfer of the buildings and land related to housing authority operations to BRI. This option agreement expired October 31, 2014. By approval of this ordinance the Town and the Housing Authority will execute a new option agreement with BRI with the same terms as the previous agreement, with an expiration date of December 31, 2015. This is a first reading, with no action required at this time. Staff will bring this ordinance back to the Board for a second reading on December 9, 2014, with the request that it be passed by emergency. This is required due to the fact that for the application processes described above BRI must show it has ownership rights in the property as of December 31, 2014.

Action: This was the first reading of Ordinance 38-2014 and it will be brought back for Board action at the December 9, 2014 Regular Meeting of the Town of Erie Board of Trustees.

IX. GENERAL BUSINESS

a. Adoption of the Board of Trustees Vision Statement

The following draft vision statement was developed during the Town of Erie, Board of Trustee Planning Retreat on Saturday October 18, 2014. The vision statement and goals are intended to provide broad direction for the Town over the next 6 years.

The Town Board of Erie will strive to:

1. Become financially stable, sustainable and self sufficient

- o Diversify the Town's economic portfolio by encouraging commercial, retail and primary employment growth in identified zones
- o Manage residential growth by adhering to the UDC
- o Provide a range of housing options, including mixed use housing

2. Promote a cohesive and aesthetically appealing small town look and feel with a focus on the 'core' part of Town

- o Expand retail opportunities in the core part of Town
- o Provide convenient access to improved local services
- o Improve and expand the art district/restaurants in the core area of Town

3. Maintain and enhance recreational opportunities and an active outdoor lifestyle

- o Improve connectivity of trails to parks, residential development and retail operation within the Town
- o Examine opportunities to improve bicycle and pedestrian connections with regional trail systems
- o Foster relationships and cooperation between neighboring communities and governmental entities

GENERAL BUSINESS (continued)

Action: Trustee Moore read the proposed vision statement; Trustee Schutt moved to approve the Vision Statement as presented. The motion was seconded by Trustee Moore; the motion carried with all present voting in favor thereof.

X. BOARD OF TRUSTEES REPORTS

Trustee Charles reported on the upcoming 140th Celebration of the founding of Erie, he also thanked the citizens for voting in the recent election and asked the community recognize Veterans Day.

Trustee Moore encouraged citizens to take advantage of the free indoor water checkup sponsored by the Town and thanked the Street Department for their continued maintenance for snow removal.

Mayor Harris met with the School Districts to discuss new schools in Erie and asked that Staff look into a cross walk on Cheesman and Main Street. Mayor Harris also encouraged other members of the Board to attend the Thursday Senior Luncheon.

XI. ADJOURNMENT

Action: Mayor Pro Tem Gruber moved to adjourn the November 11, 2014 Regular Meeting of the Town of Erie Board of Trustees; the motion was seconded by Trustee Moore. The motion carried with all present voting in favor thereof.

Action: Mayor Harris adjourned the November 11, 2014 Regular Meeting of the Town of Erie Board of Trustees at 10:10 p.m.

Respectfully Submitted,

Nancy J. Parker, CMC, Town Clerk

Tina Harris-Mayor

TOWN OF ERIE
BOARD OF TRUSTEES SPECIAL MEETING
Tuesday, November 18, 2014
6:00 p.m.
Board Room, Erie Town Hall, 645 Holbrook, Erie, CO 80516

I. CALL MEETING TO ORDER

Mayor Harris called the November 18, 2014 Special Meeting of the Board of Trustees to order at 6:00 p.m.

II. ROLL CALL

Roll Call: Trustee Carroll – present
Mayor Pro Tem Gruber – present
Trustee Charles – present
Trustee Moore – present
Trustee Woog – present
Trustee Schutt – present
Mayor Harris – present

III. APPROVAL OF THE AGENDA

Action: Trustee Schutt moved to approve the November 18, 2014 agenda. The motion, seconded by Trustee Moore, carried with all voting in favor thereof.

IV. RESOLUTIONS

a. Resolution 14-132; A Resolution Awarding a GMP Contract for the Public Safety Facility

Gary Behlen, Director of Public Works presented staff recommendations for the approval of Resolution 14-132. Since the bond was approved in April, staff has been working with the team and work has begun on the project. The Board approved a Resolution for a GMP (Guaranteed Maximum Price) in August to begin the site work. The project was bid in October and received over 60 bids for the different divisions. The team has a good price; they have reviewed the budget and find that it meets all their goals. Staff is requesting that the Board approve the Resolution and award the GMP Contract to Fransen Pittman in the amount of \$6,120,948.00.

Action: Mayor Pro Tem Gruber moved to approve Resolution 14-132. The motion, seconded by Trustee Moore, carried with the following Roll Call vote:

Trustee Carroll – Yes
Mayor Pro Tem Gruber – Yes

Trustee Charles – Yes
Trustee Moore – Yes
Trustee Woog – Yes
Trustee Schutt – Yes
Mayor Harris – Yes

b. Resolution 14-133; A Resolution Awarding a Contract for the Initial Phase of the Town Hall Remodel Project – Feasibility and Needs Assessment

Gary Behlen, Director of Public Works presented staff recommendations for the approval of Resolution 14-133. In early 2014, the Town solicited Requests for Proposal's and interviewed four architectural firms. The first phase in the process is the Feasibility and Needs Assessment to understand the future needs/space utilization of the current Town Hall. This contract was awarded to Oz Architecture for \$27,000 for the initial phase. There will be future phases with design work as the project moves forward. Staff is requesting that the Board approve the Resolution and award the Consulting Contract to Oz Architecture for the Town Hall Needs Assessment and Programming Plan Stage of the Town Hall Remodel Project in the amount of \$24,590.00.

Action: Trustee Schutt moved to approve Resolution 14-133. The motion, seconded by Trustee Charles, carried with the following Roll Call vote:

Trustee Carroll – Yes
Mayor Pro Tem Gruber – Yes
Trustee Charles – Yes
Trustee Moore – Yes
Trustee Woog – Yes
Trustee Schutt – Yes
Mayor Harris – Yes

PUBLIC HEARING

c. Resolution 14-128; A Resolution Providing For The Supplemental Appropriation of Money to Various Funds in the Amounts and for the Purposes Set Forth Below for the Town of Erie, Colorado for the 2014 Budget Year

Action: Mayor Harris opened the Public Hearing for Resolution 14-128 at 6:41 p.m.

Steve Felten, Director of Finance presented Resolution 14-128; the supplemental appropriation of money to various funds for the 2014 budget year. This is the second of two supplemental appropriations during the course of the year. Most of the supplemental appropriation requests are items that have already been presented to, and approved by the Board; some are line item transfers and some of the requested appropriations are new. Staff is recommending approval of Resolution 14-128.

Action: Mayor Harris closed the Public Hearing for Resolution 14-128 at 6:53 p.m.

Action: Mayor Pro Tem Gruber moved to approve Resolution 14-128. The motion, seconded by Trustee Carroll, carried with the following Roll Call vote:

Trustee Carroll – Yes
Mayor Pro Tem Gruber – Yes
Trustee Charles – Yes
Trustee Moore – Yes
Trustee Woog – Yes
Trustee Schutt – Yes
Mayor Harris – Yes

PUBLIC HEARING

d. Resolution 14-129; A Resolution Summarizing Expenditures and Revenues for Each Fund and Adopting a Budget for the Town of Erie, Colorado for the Calendar Year Beginning the First Day of January, 2015 and Ending on the Last Day of December, 2015

Action: Mayor Harris opened the Public Hearing for Resolution 14-129 at 6:53 p.m.

Steve Felten, Director of Finance presented Resolution 14-129 to the Board. This is the first of two resolutions being brought before the Board for approval relating to the 2015 budget. Resolution 14-129 formally adopts the 2015 budget and Resolution 14-130 appropriates those funds. Both of these steps are required by Ordinance and State Statute. Staff recommends that the Board approve Resolution 14-129 to adopt the 2015 budget.

Action: Trustee Schutt moved to approve Resolution 14-129. The motion, seconded by Mayor Pro Tem Gruber, carried with the following Roll Call vote:

Trustee Carroll – Yes
Mayor Pro Tem Gruber – Yes
Trustee Charles – Yes
Trustee Moore – No
Trustee Woog – Yes
Trustee Schutt – Yes
Mayor Harris – Yes

Action: Mayor Harris closed the Public Hearing for Resolution 14-129 at 7:45 p.m.

PUBLIC HEARING

e. Resolution 14-130; A Resolution Appropriating Sums of Money to the Various Funds in the Amounts and for the Purpose As Set Forth Below for the Town of Erie, Colorado for the 2015 Budget Year

Action: Mayor Harris opened the Public Hearing for Resolution 14-130 at 7:45 p.m.

Action: Trustee Schutt moved to approve Resolution 14-130. The motion, seconded by Mayor Pro Tem Gruber, carried with the following Roll Call vote:

Trustee Carroll – Yes
Mayor Pro Tem Gruber – Yes
Trustee Charles – Yes
Trustee Moore – No
Trustee Woog – Yes
Trustee Schutt – Yes
Mayor Harris – Yes

Action: Mayor Harris closed the Public Hearing for Resolution 14-130 at 7:49 p.m.

PUBLIC HEARING

f. Resolution 14-131; A Resolution Establishing and Certifying the Property Taxes for the Town of Erie, Colorado in Weld and Boulder Counties for the Year 2015

Action: Mayor Harris opened the Public Hearing for Resolution 14-131 at 7:49 p.m.

Action: Mayor Pro Tem Gruber moved to continue Resolution 14-131 to the December 9, 2014 Regular Board of Trustees Meeting. The motion, seconded by Trustee Charles, carried with all voting in favor thereof.

V. EXECUTIVE SESSION

a. EXECUTIVE SESSION for a conference with the Town Attorney and Special Bond Counsel for the purpose of receiving legal advice on specific legal questions under C.R.S. Section 24-6-402(4)(b); specifically, to receive legal advice concerning participation in the MCDC initiative; for the purpose of determining positions relative to matters that may be subject to negotiations, developing strategy for negotiations, and/or instructing negotiators, under C.R.S. Section 24-6-402(4)(e); specifically, to discuss negotiation of new Memorandums of Understanding with oil and gas companies; and, for discussion of a personnel matter under C.R.S. Section 24-6-402(4)(f) and not involving: any specific employees who have requested discussion of the matter in open session; any member of this body or any elected official; the appointment of any person to fill an office of this body or of an elected official; or personnel policies that do not require the discussion of matters personal to particular employees; specifically, to discuss the Annual performance evaluation of Town Administrator AJ Krieger.

Action: Trustee Schutt moved to go into Executive Session for a conference with the Town Attorney and Special Bond Counsel for the purpose of receiving legal advice on

specific legal questions under C.R.S. Section 24-6-402(4)(b); specifically, to receive legal advice concerning participation in the MCDC initiative; for the purpose of determining positions relative to matters that may be subject to negotiations, developing strategy for negotiations, and/or instructing negotiators, under C.R.S.

Section 24-6-402(4)(e); specifically, to discuss negotiation of new Memorandums of Understanding with oil and gas companies; and, for discussion of a personnel matter under C.R.S. Section 24-6-402(4)(f) and not involving: any specific employees who have requested discussion of the matter in open session; any member of this body or any elected official; the appointment of any person to fill an office of this body or of an elected official; or personnel policies that do not require the discussion of matters personal to particular employees; specifically, to discuss the Annual performance evaluation of Town Administrator, AJ Krieger. The motion, seconded by Trustee Charles, carried with all voting in favor thereof.

Mayor Harris announced its Tuesday, November 18, 2014, and the time is 8:00 p.m. For the record, I am the presiding officer, Mayor Tina Harris. As required by the Open Meetings Law, this executive session is being electronically recorded.

Also present at this executive session are the following persons:

Mayor Pro Tem Mark Gruber; Trustees Janice Moore, Jennifer Carroll, Waylon Schutt, Dan Woog, Scott Charles; Town Administrator A.J. Krieger; Public Works Director Gary Behlen; Community Development Department Director Marty Ostholthoff; Special Bond Counsel Maria Harwood; and, Town Attorney Mark Shapiro.

This is an executive session for the following purpose:

For a conference with the Town Attorney and Special Bond Counsel for the purpose of receiving legal advice on specific legal questions under C.R.S. Section 24-6-402(4)(b); specifically, to receive legal advice concerning participation in the MCDC initiative; For the purpose of determining positions relative to matters that may be subject to negotiations, developing strategy for negotiations, and/or instructing negotiators, under C.R.S. Section 24-6-402(4)(e); specifically, to discuss negotiation of new Memorandums of Understanding with oil and gas companies; and, for discussion of a personnel matter under C.R.S. Section 24-6-402(4)(f) and not involving: any specific employees who have requested discussion of the matter in open session; any member of this body or any elected official; the appointment of any person to fill an office of this body or of an elected official; or personnel policies that do not require the discussion of matters personal to particular employees; specifically, to discuss the Annual performance evaluation of Town Administrator AJ Krieger.

Upon completion of the Executive Session, Mayor Harris announced that the time is now 11:47 p.m., and the executive session has been concluded. The participants in the executive session were:

Mayor Tina Harris, Mayor Pro Tem Mark Gruber; Trustees Janice Moore, Jennifer Carroll, Waylon Schutt, Dan Woog and Scott Charles; Town Administrator A.J. Krieger; Community Development Department Director Marty Ostholthoff; Town Attorney Mark Shapiro; Finance Director Steve Felten; and Assistant to the Town Administrator Fred Diehl.

For the record, if any person who participated in the executive session believes that any substantial discussion of any matters not included in the motion to go into the executive session occurred during the executive session, or that any improper action occurred during the executive session in violation of the Open Meetings Law, I would ask that you state your concerns for the record.

Seeing none, the next agenda item is adjournment.

VI. ADJOURNMENT

Action: Trustee Moore moved to adjourn the November 18, 2014 Town of Erie Board of Trustees Special Meeting; the motion was seconded by Trustee Schutt. The motion carried with all voting unanimous in favor.

Action: Mayor Harris adjourned the November 18, 2014 Town of Erie Board of Trustee Special Meeting at 11:48 p.m.

Respectfully Submitted,

Melinda Helmer, CMC, Deputy Town Clerk

Tina Harris, Mayor

ATTACHMENT A

RESOLUTION NO. 14-134

A RESOLUTION AUTHORIZING THE TOWN OF ERIE, COLORADO, TO ENTER INTO A FIFTH AMENDMENT TO THE BRIDGEWATER ANNEXATION AGREEMENT; AUTHORIZING AND DIRECTING THE APPROPRIATE TOWN OFFICERS TO SIGN SAID FIFTH AMENDMENT; AND, SETTING FORTH DETAILS IN RELATION THERETO.

WHEREAS, the Town of Erie, Colorado and Tallgrass Investors, LLC and the Community Development Group of Erie, Inc., (Tallgrass Investors, LLC and the Community Development Group of Erie, Inc. together referred to as the “Owners”), previously entered into the Bridgewater Annexation Agreement on October 9, 2007; and,

WHEREAS, the Owners and the Town previously entered into the First Amendment of the Bridgewater Annexation Agreement on December 14, 2010; and,

WHEREAS, the Owners and the Town previously entered into the Second Amendment of the Bridgewater Annexation Agreement on September 27, 2011; and,

WHEREAS, the Owners and the Town previously entered into the Third Amendment of the Bridgewater Annexation Agreement on January 8, 2013; and,

WHEREAS, the Owners and the Town previously entered into the Fourth Amendment of the Bridgewater Annexation Agreement on July 23, 2013; and,

WHEREAS, the Owners and the Town, desire to enter into a Fifth Amendment to the Bridgewater Annexation Agreement; and,

WHEREAS, the Board of Trustees of the Town of Erie believes it is in the best interest of the Town to enter into the Fifth Amendment to the Bridgewater Annexation Agreement.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE TOWN OF ERIE, COLORADO, AS FOLLOWS:

Section 1. That the Fifth Amendment to the Bridgewater Annexation Agreement between the Town of Erie and Owners, a copy of which is attached hereto, marked “Exhibit A,” and incorporated herein by reference, is found to be reasonable and acceptable.

Section 2. That the Town of Erie be and is hereby authorized and directed to enter into the Fifth Amendment, and the appropriate Town officers are hereby authorized and directed to sign and bind the Town of Erie to said Fifth Amendment.

Section 3. That entering into the Fifth Amendment is found to be in the best interest of the Town of Erie, and necessary for the preservation of the public health and safety.

ADOPTED AND APPROVED THIS 9TH DAY OF DECEMBER, 2014, BY THE BOARD OF TRUSTEES OF THE TOWN OF ERIE, COLORADO.

TOWN OF ERIE,
a Colorado municipal corporation

By: _____
Tina Harris, Mayor

ATTEST:

By: _____
Nancy Parker, Town Clerk

Exhibit A

**FIFTH AMENDMENT TO THE
BRIDGEWATER ANNEXATION AGREEMENT**

THIS FIFTH AMENDMENT TO THE BRIDGEWATER ANNEXATION AGREEMENT (“Fifth Amendment”) is made and entered into this ____ day of _____ 2014 (the “Effective Date”), by and between the TOWN OF ERIE, a Colorado municipal corporation, in the Counties of Weld and Boulder, State of Colorado, hereinafter referred to as “Erie” or “Town”, and TALLGRASS INVESTORS, LLC, a Colorado limited liability company and COMMUNITY DEVELOPMENT GROUP OF ERIE, INC., a Colorado corporation, 2500 Arapahoe Avenue, Suite 220, Boulder, Colorado, 80302, hereinafter jointly referred to in the singular as “Owner”.

WHEREAS, Erie and Owner previously entered into that certain Bridgewater Annexation Agreement, dated October 9, 2007 and recorded on November 19, 2007 at Reception No. 3518317 in the records of the Weld County Clerk and Recorder (the “Original Agreement”); and,

WHEREAS, Erie and Owner previously entered into the First Amendment to the Bridgewater Annexation Agreement, dated December 13, 2010 and recorded on December 30, 2010 at Reception No. 3741841 in the records of the Weld County Clerk and Recorder (the “First Amendment”); and,

WHEREAS, Erie and Owner previously entered into the Second Amendment of the Bridgewater Annexation Agreement, dated October 4, 2011 and recorded on October 12, 2011 at Reception No. 3798317 in the records of the Weld County Clerk and Recorder (the “Second Amendment”); and,

WHEREAS, Erie and Owner previously entered into the Third Amendment of the Bridgewater Annexation Agreement, dated January 8, 2013 and recorded on January 21, 2013 at Reception No. 3904988 in the records of the Weld County Clerk and Recorder (the “Third Amendment”), the Original Agreement, the First Amendment, the Second Amendment, and the Third Amendment together referred to hereinafter as the “Agreement”; and,

WHEREAS, Erie and Owner previously entered into the Fourth Amendment of the Bridgewater Annexation Agreement, dated July 23, 2013 and recorded on October 6, 2014 at Reception No. 4051656 in the records of the Weld County Clerk and Recorder (the “Fourth Amendment”), the Original Agreement, the First Amendment, the Second Amendment, the Third Amendment, and the Fourth Amendment together referred to hereinafter as the “Agreement”; and,

WHEREAS, Erie and Owner desire to amend the Agreement to modify, amend and add certain terms and provisions to the Agreement, as set forth herein below.

NOW, THEREFORE, in consideration of the foregoing, the parties hereto promise,

covenant and agree as follows:

1. Terms and words used herein shall have the same definition and meaning as those terms and words set forth and defined in the Agreement unless specifically stated otherwise herein.

2. Section XII.A.2, of the Agreement (as set forth in the Second Amendment) is hereby deleted in its entirety and replaced by the following new Section XII.A.2, to read as follows:

2. The Owner will design, construct and install the mast arm traffic signal on Erie Parkway and Weld County Road 5. Such construction and installation of the mast arm traffic signal shall be completed, and the signal shall become operational, on or prior to one (1) year from the Effective Date of this Fifth Amendment. Erie will reimburse fifty percent (50%) of the total costs for the mast arm traffic signal to Owner at the time of construction acceptance by Erie, upon presentation by Owner of verification of costs and payments. The St. Vrain Valley School District is responsible for twenty-five percent (25%) of this signal cost. Erie has previously collected sixty-two thousand five hundred dollars (\$62,500.00) of this signal cost from St. Vrain Valley School District, representing the 25% of the signal cost. Erie will pay the \$62,500.00 to the Owner upon construction acceptance and the presentation by Owner of verification of costs and payments.

3. Section XII.A.3, of the Agreement (as set forth in the Second Amendment) is hereby deleted in its entirety and replaced by the following new Section XII.A.3, to read as follows:

3. The Owner will construct the mast arm traffic signal on Erie Parkway and Colliers Boulevard. Such construction and installation of the mast arm traffic signal shall be completed, and the signal shall become operational, on or prior to one (1) year from the Effective Date of this Fifth Amendment. The Town will require the other property owners adjacent to such intersection to reimburse 50% of the total costs for this signal to Owner. The Town shall be responsible for the Mountain View Fire Protection District corner reimbursement which reimbursement shall be equal to 25% of the cost of the signal and shall be payable to Owner upon construction acceptance and the presentation by Owner of verification of cost and payments. Nothing contained in this Agreement shall operate to create an obligation on the part of Erie to pay or reimburse any costs to Owner the remaining 25% in the event such costs are not recovered by Erie as contemplated herein, for any reason, from the properties or property owners responsible for payments toward such signal.

4. Erie understands that responsibility for the design, construction and installation of the mast arm traffic signals on Erie Parkway and Weld County Road 5, and Erie Parkway and Colliers Boulevard (as set forth herein in this Fifth Amendment), may have been assigned by Owner to the Colliers Hill Metropolitan District Nos. 1, 2, and 3.

5. No letter of credit shall be required from Owner to be put in place with the Town for the design, construction and installation of the mast arm traffic signals on Erie Parkway and Weld County Road 5, and Erie Parkway and Colliers Boulevard (as set forth herein in this Fifth Amendment).

6. Owner shall provide a letter of credit to the Town for the two year warranty period for each of the two signals referenced herein. The letter of credit for the Erie Parkway/Weld County Road 5 signal shall be equal to 25% of the Owners 25% share of said signal. The letter of credit for the Erie Parkway/Colliers Boulevard shall be equal to 25% of the Owners 50% share of said signal. The letters of credits required herein shall be provided to the Town prior to construction acceptance of said signals.

7. In the event of any conflict, inconsistency or incongruity between the provisions of this Fifth Amendment and any of the provisions of the Agreement, the provisions of this Fifth Amendment shall in all respects govern and control.

8. Except as specifically amended herein, all other terms and conditions of the Agreement shall remain in full force and effect.

[Signatures on following page]

IN WITNESS WHEREOF, the parties have executed this Fifth Amendment as of the date first set forth above.

ERIE:
TOWN OF ERIE, a Colorado municipal corporation

By: _____
Tina Harris, Mayor

ATTEST:

By: _____
Nancy Parker, Town Clerk

OWNER:
COMMUNITY DEVELOPMENT GROUP OF ERIE, INC. a Colorado corporation

By: _____
Charles R. Bellock, President

ATTEST:

By: _____
Jon R. Lee, Authorized Representative

OWNER:
TALLGRASS INVESTORS, LLC, A Colorado limited liability company

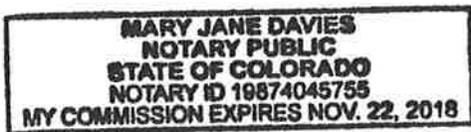
By: _____
Charles R. Bellock, Manager

STATE OF COLORADO)
) ss.
COUNTY OF Boulder)

Subscribed and sworn to before me this 18 day of November, 2014, by Charles R. Bellock as President and Jon R. Lee as Authorized Representative of Community Development Group of Erie, Inc.

Witness my hand and official seal.
My Commission expires 11-22-18.

Mary Jane Davies
Notary Public

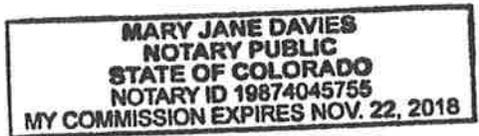


STATE OF COLORADO)
) ss.
COUNTY OF Boulder)

Subscribed and sworn to before me this 18 day of November, 2014, by Charles R. Bellock as Manager of Tallgrass Investors, LLC.

Witness my hand and official seal.
My Commission expires 11-22-2018.

Mary Jane Davies
Notary Public



11/17/14

TOWN OF ERIE
BOARD OF TRUSTEE AGENDA ITEM

Board Meeting Date: December 9, 2014

SUBJECT: **RESOLUTION**
 Consideration of Resolution 14-135: A Resolution Authorizing Award Of A Construction Contract To Power & Communications, Inc., In The Amount Of \$21,340; And Setting Forth Details In Relation Thereto.

DEPARTMENT: Public Works

PRESENTER/PREPARER: **Gary Behlen, Director of Public Works**
Wendi Palmer, Public Works Civil Engineer

FISCAL INFORMATION: Cost as Recommended: **\$25,600**
 Balance Available: \$50,000
 Fund: Water Fund Administration
 Budget Line Item Number: 500 . 70 . 110 . 605000 . 100106
 New Appropriation Required: Yes No

STAFF RECOMMENDATION: Approving Resolution 14-135 awarding said contract, authorizing the Mayor to execute said contract, authorizing Staff to expend contracted funds and contingency funds.

SUMMARY AND BACKGROUND OF SUBJECT MATTER:

The 2014 Capital Budget includes funds for the Locate Fiber to the North Water Reclamation Facility project. The project was created to install tracer wire in the existing conduit used for the fiber optic line to enable Town staff to accurately locate this important Town facility. This fiber optic line is owned and maintained by the Town. It connects phone, internet and the computer network between Town Hall and the North and South Water Reclamation Facilities. Between the South Water Reclamation Facility and Town Hall the fiber line utilizes the overhead power poles.

An Invitation to bid was posted on the Town's website on October 15, 2014 to ensure that local contractors were notified about this project. No Erie contractors submitted bids.

A pre-bid meeting was held on October 30, 2014 and the following bids were received on November 20, 2014:

Bid Information:

Contractor	Bid Amount
Power & Communications, Inc.	\$21,340.00
Network Cabling Infrastructures, Inc.	\$39,278.00
Rocky Mountain Communication Specialties	\$40,007.70
Dillie & Kuhn Fiber Optic Construction	\$72,850.00
Engineer's Estimate	\$49,600.00

The low bidders is Power & Communications, Inc. Power & Communications, Inc, is located in Windsor Colorado and have been in business for 30 years. Staff has reviewed Power & Communications, Inc.'s qualifications and called their references and found them to be acceptable.

Staff is recommending awarding the construction contract for the Locate Fiber to North Water Reclamation Facility project to Power & Communications in the amount of \$21,340.

Project Budget Summary

Contract	\$21,340.00
<u>Contingency (20%)</u>	<u>\$ 4,260.00</u>
Total	\$25,600.00

Project Schedule

Notice of Award	December 10, 2014
Notice to Proceed	December 23, 2014
Construction Complete	February 2015

Board Goal

This serves the Board's goal for Infrastructure – Fund and provide essential infrastructure that corresponds with the planned rate of growth.

Staff Review:

_____ Town Attorney
_____ Town Clerk
_____ Community Development Director
_____ Finance Director
 _____ Police Chief
_____ Public Works Director

Approved by:



A.J. Krieger
Town Administrator

ATTACHMENTS:

- a. Resolution 14-135
- b. Vicinity Map

RESOLUTION NO. 14-135

A RESOLUTION OF THE TOWN OF ERIE AWARDING A CONSTRUCTION CONTRACT TO POWER & COMMUNICATIONS, INC. FOR THE LOCATE FIBER TO THE NORTH WATER RECLAMATION FACILITY PROJECT IN THE AMOUNT OF \$21,340.00; AND SETTING FORTH DETAILS IN RELATION THERETO

WHEREAS, the Town of Erie, Colorado wishes to award a Construction Contract to Power & Communications, Inc. for the Locate Fiber to the North Water Reclamation Facility Project in the amount of \$21,340.00; and

WHEREAS, the Board of Trustees of the Town of Erie believes it is in the best interest of the Town to enter into such contract.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE TOWN OF ERIE, COLORADO, AS FOLLOWS:

Section 1. That the contract between the Town of Erie and Power & Communications, Inc., is found to be a reasonable and acceptable contract for the Locate Fiber to the North Water Reclamation Facility Project.

Section 2. That the Town of Erie be and is hereby authorized and directed to enter into the contract with Power & Communications, Inc. and the Appropriate Town Officers are hereby authorized and directed to sign and bind the Town of Erie to said contract in the amount of \$21,340.00 with a contingency not to exceed \$4,260.00.

Section 3. This contract is found to be in the best interest of the Town of Erie, and necessary for the preservation of the public health and safety.

ADOPTED AND APPROVED THIS 9th DAY OF DECEMBER, 2014, BY THE BOARD OF TRUSTEES OF THE TOWN OF ERIE, COLORADO.

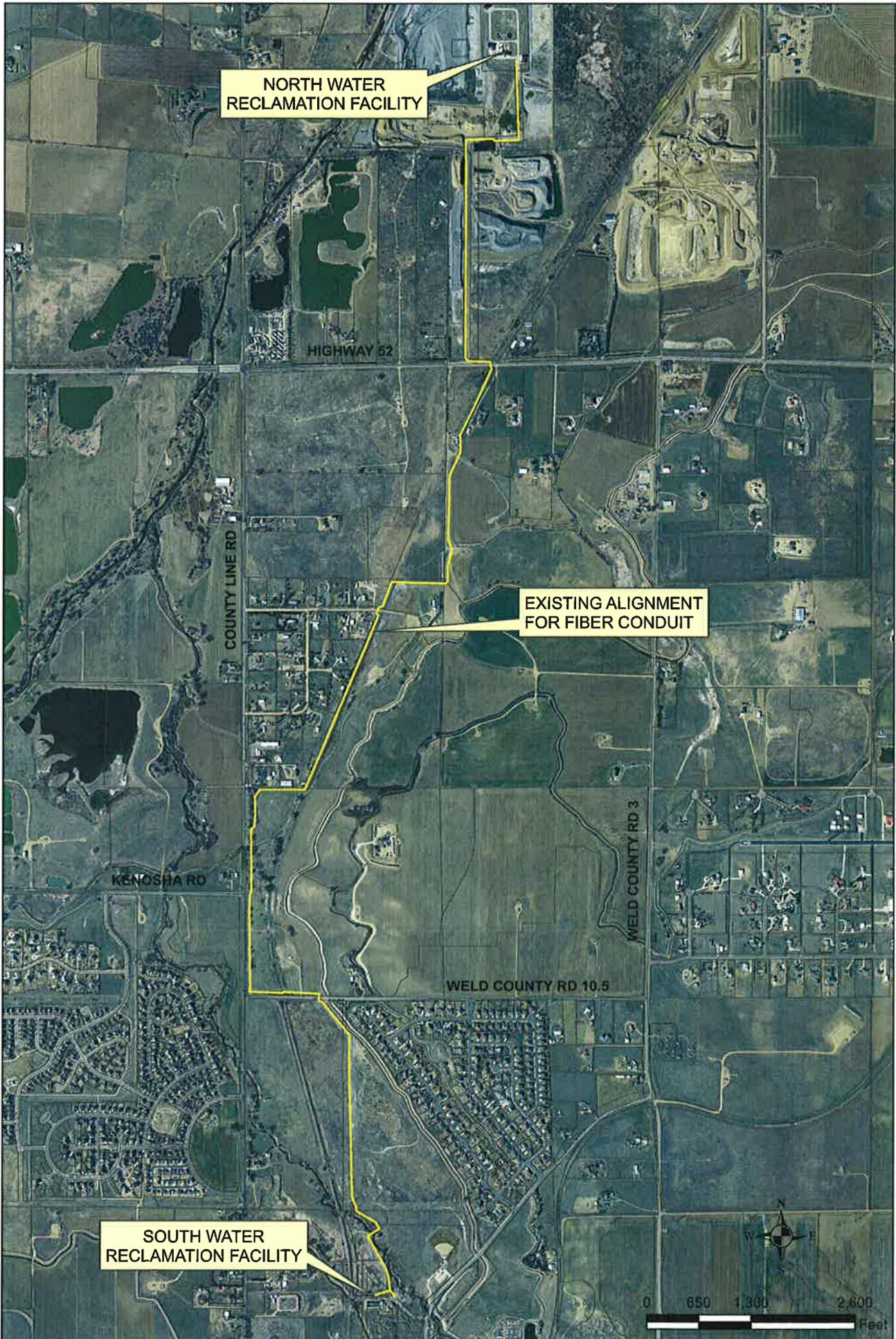
TOWN OF ERIE,
a Colorado Municipal Corporation

By: _____
Tina Harris, Mayor

ATTEST:

By: _____
Nancy Parker, CMC, Town Clerk

VICINITY MAP FOR LOCATE FIBER
TO NORTH WATER RECLAMATION FACILITY



TOWN OF ERIE
BOARD OF TRUSTEE AGENDA ITEM

Board Meeting Date: December 9, 2014

SUBJECT: **RESOLUTION**
Consideration of Resolution 14-136: A Resolution Authorizing Award Of A Design Contract for the Coal Creek Improvements To RESPEC, Inc., In The Amount Of \$66,000.00; And Setting Forth Details In Relation Thereto.

DEPARTMENT: Public Works

Gary Behlen, Director of Public Works

PRESENTER/PREPARER: **Russell Pennington, Deputy Director of Public Works**
Wendi Palmer, Public Works Civil Engineer

FISCAL Cost as Recommended: **\$82,500**
INFORMATION: Balance Available: \$846,903
Fund: Storm Drainage Impact Fund
Budget Line Item
Number: 340 . 70 . 110 . 605000 . 100062
New Appropriation Required: Yes No

STAFF RECOMMENDATION: Approving Resolution 14-136 awarding said contract, authorizing the Town Mayor to execute said contract, authorizing Staff to expend contracted funds and contingency funds.

SUMMARY AND BACKGROUND OF SUBJECT MATTER:

The 2014 Capital Budget includes funds to design improvements to Coal Creek. Additional funds for construction are planned in the budget for 2016. If a portion of the improvements to Coal Creek can be constructed utilizing the current budget, the project may be bid in two bid packages.

Coal Creek is a major drainage way that enters Erie at the west side of Erie Airpark Subdivision and runs north through Erie and leaves Erie at Kenosha Road. The section of Coal Creek east of Historic Erie was improved in the mid1990's as a flood control project which included enlarging the creek to contain the 100-year flows. This improvement removed a large portion of Historic Erie from the flood hazard area. The section between Erie Commons and Grandview subdivisions was improved in the mid 2000's when Erie Commons first began development. The improvements Erie Commons made widened the creek, added a pedestrian trail, and eliminated the need for the levee south of the railroad tracks. The remainder of Coal Creek has not been improved except a small section near a pedestrian crossing south of Vista Parkway.

In 2012, the Town of Erie, along with UDFCD, and five other municipalities, sponsored a Coal Creek Rock Creek Major Drainage Way Plan. In this Plan, Coal Creek is divided into reaches. The reaches within Erie are Reach 2 through Reach 11. Please refer to Figure 6-2 from the Plan which is attached. Town Staff selected two reaches for design (Reach 8 and Reach 10), based on known utility and trail concerns.

Reach 8 is adjacent to an irrigation pond that was damaged during the September 2013 flood. The pond has been repaired, but no improvements were made to Coal Creek. The creek banks are very steep and bank erosion is a problem. Along the east edge of the creek the bank is over 20 feet tall. There is a pedestrian trail and a 12-inch potable waterline east of the creek that could be damaged if the bank erosion is not controlled. Stabilizing the banks is desired to improve Coal Creek and to protect both the trail and the existing waterline. If necessary reconstructing portions of the trail and waterline will need to be included in the design.

Reach 10 is between Vista Parkway and a taxiway crossing in Airpark Subdivision. There is a new crusher fine trail that was completed in 2013. This trail was damaged during the September 2013 flood. The trail has been repaired and is now open to the public. The creek banks are very erosive and during the September 2013 flood, the banks eroded causing several locations to be closer than desired to the existing trail. FEMA would not fund repairs to the banks of Coal Creek. In addition to the concerns for trail safety, the Town has plans for constructing a sanitary sewer that will be in close proximity to the east bank of Coal Creek. Stabilizing the banks is desired to improve Coal Creek and to protect both the trail and the future sanitary sewer. If necessary, reconstructing portions of the trail will need to be included in the design.

A Request for Proposal was posted on the Town's website on October 17, 2014 to ensure that local consultants were notified about this project. One consultant (RESPEC) used a local surveyor as part of their team.

The following schedule was used for consultant selection:

Request for Proposal Issued	October 17, 2014
Pre-Proposal Meeting	October 27, 2014
Proposals Due	November 18, 2014
Consultant Selected	November 19, 2014

Staff reviewed three proposals. All three proposals were submitted by consultants that have experience with this type of work and have worked with the Town, all three proposals were opened. The following are the fee proposals for design:

Fee Proposal Information

RESPEC, Inc.	\$66,000.00
Stantec	\$91,737.00
Loris and Associates	\$211,088.00

Staff is recommending awarding RESPEC this project based on their qualifications, approach to the project, and design cost. RESPEC has experience with this type of project design and has successfully completed two FEMA Funded projects for the Town in the past year. One is the Irrigation Reservoir Repair project and other one is the Drop Structure and Pedestrian Bridge Repair. Both of these projects are in Coal Creek, In addition to the two recent design projects they have just completed, RESPEC is the design firm that completed the Coal Creek Rock Creek Major Drainage Way Plan.

Project Budget Summary

Contract	\$66,000.00
Contingency (25%)	\$16,500.00
Total	\$82,500.00

A 25% contingency is being recommended to allow for unknown conditions which may require additional time for survey, design and permitting.

Remaining funds will be used in the construction of the project, which will be presented to the Board at a later date.

Project Schedule

Notice of Award	December 10, 2014
Public Meeting with Concept Design Options	January, 2015
Final Design Complete	June, 2015

Board Goal

This serves the Board's goal to Maintain a safe community in which to live, work, learn, and play by improving Coal Creek and making existing trails safer.

Staff Review:

_____ Town Attorney
_____ Town Clerk
_____ Community Development Director
_____ Finance Director
 _____ Police Chief
_____ Public Works Director

Approved by:


A.J. Krieger
Town Administrator

ATTACHMENTS:

- a. Resolution 14-136
- b. Figure 6-2, Coal Creek Recommended Plan from the Coal Creek Rock Creek Major Drainage Way Plan

RESOLUTION NO. 14-136

A RESOLUTION OF THE TOWN OF ERIE AWARDING A DESIGN CONTRACT FOR COAL CREEK IMPROVEMENTS TO RESPEC, INC. IN THE AMOUNT OF \$66,000.00; AND SETTING FORTH DETAILS IN RELATION THERETO

WHEREAS, the Town of Erie, Colorado wishes to award a Design Contract to RESPEC, Inc. for Coal Creek Improvements in the amount of \$66,000.00; and

WHEREAS, the Board of Trustees of the Town of Erie believes it is in the best interest of the Town to enter into such contract.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE TOWN OF ERIE, COLORADO, AS FOLLOWS:

Section 1. That the contract between the Town of Erie and RESPEC, Inc., is found to be a reasonable and acceptable contract for Coal Creek Improvements.

Section 2. That the Town of Erie be and is hereby authorized and directed to enter into the contract with RESPEC, Inc. and the Appropriate Town Officers are hereby authorized and directed to sign and bind the Town of Erie to said contract in the amount of \$66,000.00 with a contingency not to exceed \$16,500.00.

Section 3. This contract is found to be in the best interest of the Town of Erie, and necessary for the preservation of the public health and safety.

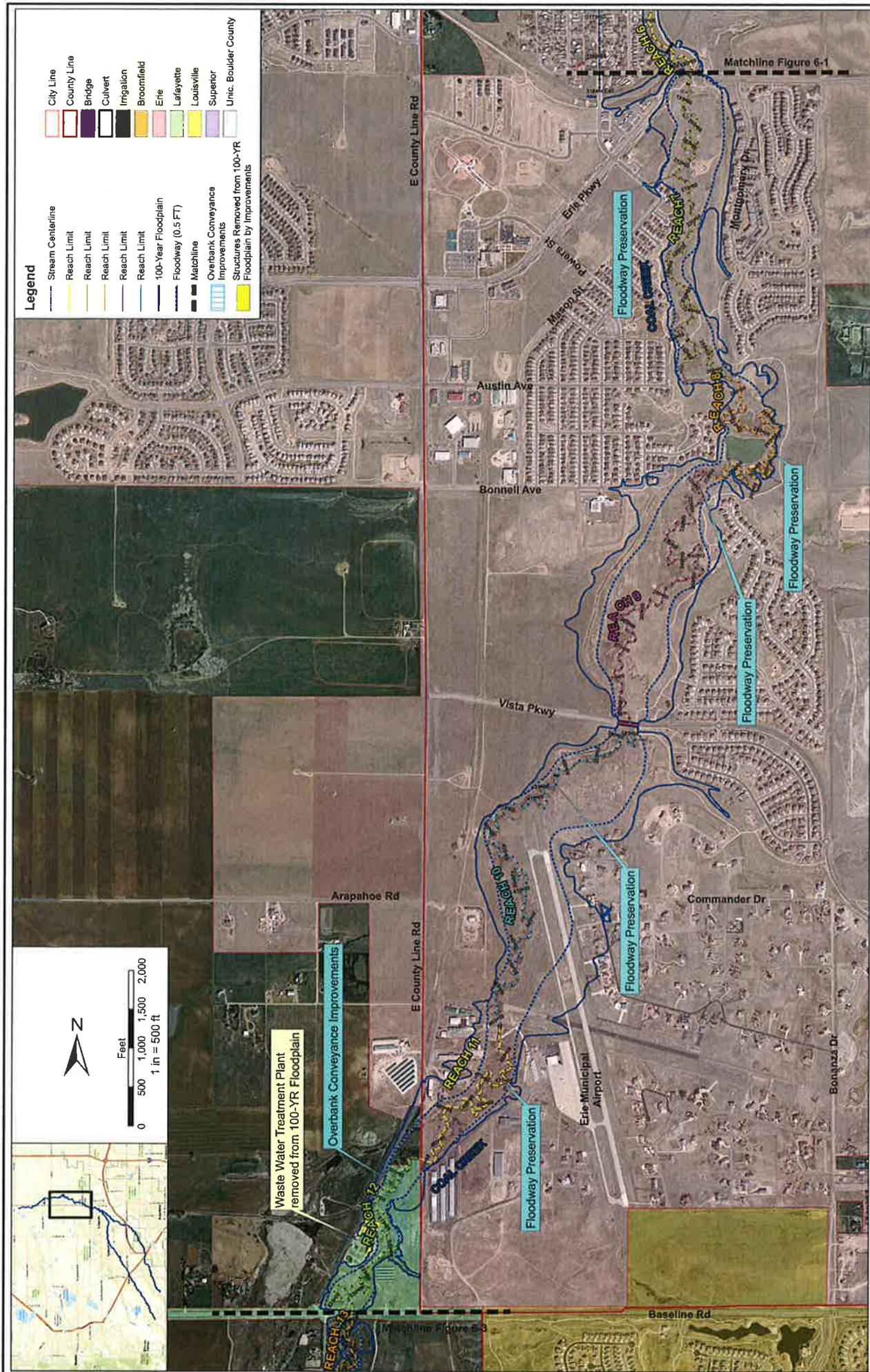
ADOPTED AND APPROVED THIS 9th DAY OF DECEMBER, 2014, BY THE BOARD OF TRUSTEES OF THE TOWN OF ERIE, COLORADO.

TOWN OF ERIE,
a Colorado Municipal Corporation

By: _____
Tina Harris, Mayor

ATTEST:

By: _____
Nancy Parker, CMC, Town Clerk



Legend

- Stream Centerline
- Reach Limit
- 100-Year Floodplain
- Floodway (0.5 FT)
- Matchline
- Overbank Conveyance Improvements
- Structures Removed from 100-YR Floodplain by Improvements
- City Line
- County Line
- Bridge
- Culvert
- Irrigation
- Broomfield
- Erie
- Lafayette
- Louisville
- Superior
- Uninc. Boulder County

0 500 1,000 1,500 2,000
 Feet
 1 in. = 500 ft

Waste Water Treatment Plant removed from 100-YR Floodplain

Overbank Conveyance Improvements

TOWN OF ERIE
BOARD OF TRUSTEE AGENDA ITEM
Board Meeting Date: December 9, 2014

SUBJECT: **RESOLUTION**
 Consideration of Resolution 14-137: A Resolution Authorizing Award Of A Design Contract for the Boulder Creek Improvements To RESPEC, Inc., In The Amount Of \$41,595; And Setting Forth Details In Relation Thereto.

DEPARTMENT: Public Works

PRESENTER/PREPARER: **Gary Behlen, Director of Public Works**
Russell Pennington, Deputy Director of Public Works
Wendi Palmer, Civil Engineer

FISCAL INFORMATION: Cost as Recommended: **\$52,000**
 Balance Available: \$200,000
 Fund: Storm Drainage Operating Fund
 Budget Line Item
 Number: 520 . 70 . 110 . 605000 . 100153
 New Appropriation Required: Yes No

STAFF RECOMMENDATION: Approving Resolution 14-137 awarding said contract, authorizing the Town Mayor to execute said contract, authorizing Staff to expend contracted funds and contingency funds.

SUMMARY AND BACKGROUND OF SUBJECT MATTER:

The 2014 second supplemental budget, approved at the November 18, 2014 Board Meeting, includes funds to design improvements to Boulder Creek. Depending upon the construction cost, additional funds for construction may need to be allocated.

Boulder Creek is a major drainage way that crosses County Line Road north of State Highway 52 and flows near the west edge of Erie's 1,000 acre-foot reuse reservoir. The reuse reservoir was purchased by the Town for storing reuse water from the Town's North Water Reclamation Facility to be used for irrigation of parks, right of ways and other open space.

During the September 2013 flood, the reuse reservoir was damaged. The repairs to the reuse reservoir from the flood are completed and the reservoir is receiving reuse water. In addition to damage to the reuse reservoir, the east bank of Boulder Creek near the northwest corner of the reuse reservoir was eroded during the flood event. FEMA would not fund repairs to the banks of Boulder Creek. To protect the reuse reservoir from potential flood damage as the east bank continues to erode, the Town Staff desires to stabilize the east bank of Boulder Creek adjacent to the reuse reservoir.

In addition to stabilizing the east bank of Boulder Creek, the design will include a diversion structure to allow decreed water to be diverted from Boulder Creek into the reuse reservoir.

A Request for Proposal was posted on the Town's website on October 20, 2014 to ensure that local consultants were notified about this project. One consultant (RESPEC) used a local surveyor as part of their team.

The following schedule was used for consultant selection:

Request for Proposal Issued	October 20, 2014
Pre-Proposal Meeting	October 29, 2014
Proposals Due	November 20, 2014

Staff reviewed three proposals. All three proposals were submitted by consultants that have experience with this type of work and have worked with the Town. All three proposals were opened. The following are the fee proposals for design:

Fee Proposal Information

RESPEC, Inc.	\$41,595.00
Stantec	\$48,000.00
ICON Engineering, Inc.	\$54,365.00

Staff is recommending awarding RESPEC this project based on their qualifications, approach to the project, and design cost. RESPEC has experience with this type of project design and has successfully completed two FEMA Funded projects for the Town in the past year. One is the Irrigation Reservoir Repair project and other one is the Drop Structure and Pedestrian Bridge Repair. In addition to the two recent design projects they have just completed, RESPEC is the design firm that completed the Coal Creek Rock Creek Major Drainage Way Plan.

Project Budget Summary

Contract	\$41,595.00
Contingency (25%)	\$10,405.00
Total	\$52,000.00

A 25% contingency is being recommended to allow for unknown conditions which may require additional time for survey, design and permitting.

Remaining funds will be used in the construction of the project, which will be presented to the Board at a later date.

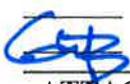
Project Schedule

Notice of Award	December 10, 2014
Preliminary Design	March, 2015
Final Design Complete	June, 2015

Board Goal

This serves the Board's goal for Infrastructure – Fund and provide essential infrastructure that corresponds with the planned rate of growth.

Staff Review:

_____ Town Attorney
 _____ Town Clerk
 _____ Community Development Director
 _____ Finance Director
 _____ Police Chief
 _____ Public Works Director

Approved by:



A.J. Krieger
 Town Administrator

ATTACHMENTS:

- a. Resolution 14-137
- b. Vicinity Map

VICINITY MAP FOR BOULDER CREEK IMPROVEMENTS



RESOLUTION NO. 14-137

A RESOLUTION OF THE TOWN OF ERIE AWARDING A DESIGN CONTRACT FOR BOULDER CREEK IMPROVEMENTS TO RESPEC, INC. IN THE AMOUNT OF \$41,595.00; AND SETTING FORTH DETAILS IN RELATION THERETO

WHEREAS, the Town of Erie, Colorado wishes to award a Design Contract to RESPEC, Inc. for Boulder Creek Improvements in the amount of \$41,595.00.00; and

WHEREAS, the Board of Trustees of the Town of Erie believes it is in the best interest of the Town to enter into such contract.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE TOWN OF ERIE, COLORADO, AS FOLLOWS:

Section 1. That the contract between the Town of Erie and RESPEC, Inc., is found to be a reasonable and acceptable contract for Boulder Creek Improvements.

Section 2. That the Town of Erie be and is hereby authorized and directed to enter into the contract with RESPEC, Inc. and the Appropriate Town Officers are hereby authorized and directed to sign and bind the Town of Erie to said contract in the amount of \$41,595.00 with a contingency not to exceed \$10,405.00.

Section 3. This contract is found to be in the best interest of the Town of Erie, and necessary for the preservation of the public health and safety.

ADOPTED AND APPROVED THIS 9th DAY OF DECEMBER, 2014, BY THE BOARD OF TRUSTEES OF THE TOWN OF ERIE, COLORADO.

TOWN OF ERIE,
a Colorado Municipal Corporation

By: _____
Tina Harris, Mayor

ATTEST:

By: _____
Nancy Parker, CMC, Town Clerk

TOWN OF ERIE
BOARD OF TRUSTEE AGENDA ITEM
Board Meeting Date: December 9, 2014

SUBJECT: **CONSENT AGENDA**
Consideration of Resolution 14-138 A Resolution Authorizing the Payment to Taser International for Tasers Provided to the Erie Police Department in the amount of \$15,300.00.

DEPARTMENT: Police Department

PRESENTER: **Marco Vasquez, Chief of Police**

FISCAL INFORMATION: Cost as Recommended: **\$15,300**
Balance Available: \$18,000
Budget Line Item Number: 100 . 60 . 630 . 530180 . 000000
New Appropriation Required: Yes No

STAFF RECOMMENDATION: **Approve Resolution 14-138 Authorizing the payment for Taser purchases provided by Taser International to the Erie Police Department.**

SUMMARY AND BACKGROUND OF SUBJECT MATTER:

The Erie Police Department does not have enough Tasers for every officer. The Erie Police Department would like to use unencumbered funds from their 2014 budget to purchase Tasers for each officer. The cost of 9 new Tasers, cartridges and holsters is \$15,300.00.

Staff Review:

_____ **Town Attorney**
_____ **Town Clerk**
_____ **Community Development Director**
_____ **Finance Director**
_____ **Police Chief**
_____ **Public Works Director**

Approved by:


_____ **A.J. Krieger**
Town Administrator

ATTACHMENTS:

- a. Resolution 14-138
- b. Copy of Quote



Prepared By Chad Gappa
 Company Name TASER International
 Company Address 17800 N. 85th Street
 Scottsdale, AZ 85255-9603
 US
 Phone (480) 502-6255
 E-mail cgappa@taser.com

Created Date 12/2/2014
 Fax (480) 696-7643
 Expiration Date 12/31/2014
 Quote Number 00033165

Customer Information

Account Name Erie Police Department - CO Email slambert@erieco.gov
 Contact Name Sarah Lambert Phone 303-926-2800
 AX Account Number 107328

Shipping and Billing Information

Bill To Name Erie Police Department - CO Ship To Name Erie Police Department - CO
 Bill To P.O. BOX 510 Ship To 645 Holbrook
 ERIE, CO 80516 Erie, CO 80516
 US US

Part Number	Product	Quantity	Sales Price	Total Price
34200	Cartridge - 15'	26.00	USD 21.55	USD 560.30
44203	CARTRIDGE - 25' HYBRID	9.00	USD 26.55	USD 238.95
44205	Cartridge - Simulation	18.00	USD 22.95	USD 413.10
22150	CARTRIDGE, PERFORMANCE, SMART, 15'	40.00	USD 28.75	USD 1,150.00
22151	CARTRIDGE, PERFORMANCE, SMART, 25'	36.00	USD 30.75	USD 1,107.00
22155	CARTRIDGE, PERFORMANCE, SMART, INERT SIM, 25'	10.00	USD 41.75	USD 417.50
22157	CARTRIDGE, PERFORMANCE, SMART, TRAINING, 25'	20.00	USD 29.75	USD 595.00
22002	HANDLE, BLACK, CLASS III, X2	9.00	USD 999.95	USD 8,999.55
22504	HOLSTER, BLACKHAWK, LEFT, X2, 44HT01BK-L-B	8.00	USD 63.95	USD 511.60
22013	KIT, DATAPORT DOWNLOAD, USB, X2/X26P	1.00	USD 159.95	USD 159.95
22010	PPM, BATTERY PACK, STANDARD, X2/X26P	10.00	USD 52.95	USD 529.50
26500	X26 Dataport Kit	1.00	USD 159.95	USD 159.95
26701	XDPM BATTERY PK ASSEMBLED	9.00	USD 40.75	USD 366.75

Subtotal USD 15,209.15
 Total Price USD 15,209.15
 Shipping and Handling USD 49.95
 Grand Total USD 15,259.10

By signing this Quote, you are entering into a contract and you certify that you have read and agree to the provisions set forth in this Quote and TASER's current Sales Terms and Conditions for Direct Sales to End User Purchasers or, in the alternative, TASER's current Sales Terms and Conditions for Direct Sales to End User Purchasers for Sales with Financing if your purchase involves financing with TASER. If your purchase includes the TASER Assurance Plan (TAP), then you are also agreeing to TASER's current Sales Terms and Conditions for the AXON Flex™ and AXON Body™ Cameras TASER Assurance Plan (U.S. Only) and/or Sales Terms and Conditions for the X2/X26P and TASER CAM HD Recorder TASER Assurance Plan (U.S. Only), as applicable to your product purchase. All of the sales terms and conditions, as well as, the TAP terms and conditions are posted at <http://www.taser.com/sales-terms-and-conditions>. If your purchase includes AXON hardware and/or EVIDENCE.com services you are also agreeing to the terms in the EVIDENCE.com Master Service Agreement posted at <http://www.taser.com/serviceagreement0213>. The sale of the Professional Services is subject to the parties execution of TASER's Professional Services Agreement and a Statement of Work. You represent that you are lawfully able to enter into contracts and if you are entering into this agreement for an entity, such as the company, municipality, or government agency you work for, you represent to TASER that you have legal authority to bind that entity. If you do not have this authority, do not sign this Quote.

Quote Acceptance:

Signature:

Printed Name:

Title:

Email:

Date:

PO Not Required:

PO Number:

RESOLUTION NO. 14-138

A RESOLUTION OF THE TOWN OF ERIE AUTHORIZING THE PURCHASE OF TASERS FROM TASER INTERNATIONAL IN THE AMOUNT OF \$15,300.00; AND SETTING FORTH DETAILS IN RELATION THERETO

WHEREAS, the Town of Erie, Colorado wishes to purchase Tasers from TASER International in the amount of \$15,300.00; and

WHEREAS, the Board of Trustees of the Town of Erie believes it is in the best interest of the Town to make such purchase.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE TOWN OF ERIE, COLORADO, AS FOLLOWS:

Section 1. That the purchase of the Tasers, in the amount of \$15,300.00; is found to be a reasonable and acceptable purchase.

Section 2. That the Town of Erie be and is hereby authorized and directed to make such purchase and the Appropriate Town Officers are hereby authorized and directed to execute the purchase and expenditure of funds in the amount of \$15,300.00.

Section 3. That this purchase is found to be in the best interest of the Town of Erie; and necessary for the preservation of the public health and safety.

ADOPTED AND APPROVED THIS 9th DAY OF DECEMBER, 2014, BY THE BOARD OF TRUSTEES OF THE TOWN OF ERIE, COLORADO.

TOWN OF ERIE,
a Colorado Municipal Corporation

By: _____
Tina Harris, Mayor

ATTEST:

By: _____
Nancy Parker, CMC, Town Clerk

TOWN OF ERIE
BOARD OF TRUSTEE AGENDA ITEM
Board Meeting Date: December 9, 2014

SUBJECT: RESOLUTION AGENDA

Consideration of Resolution 14-139 A Resolution by the Town of Erie Acting By And Through Its Erie Water Activity Enterprise ("Erie") To Continue Its Participation In The Northern Integrated Supply Project (NISP), Phase 3A, In the Amount of \$260,000; and Setting Forth Details in Relation Thereto.

DEPARTMENT: Public Works

PRESENTER: Gary Behlen, Director of Public Works

FISCAL Cost as Recommended: **\$260,000**
INFORMATION: Balance Available: \$ 406,300 (2015 budget)
Budget Line Item Number: 500 . 70 . 110 . 603500 . 100007
New Appropriation Yes No
Required:

STAFF Approving Resolution 14-139 authorizing the Town Administrator to
RECOMMENDATION: execute the agreement and authorizing Staff to expend said funds.

SUMMARY AND BACKGROUND OF SUBJECT MATTER:

The Board of Trustees previously approved agreements with Northern Colorado Water Conservancy District, acting by and through its Northern Colorado Water Conservancy District Northern Supply Project Enterprise (NCWCD) to participate in the Northern Integrated Supply Project (NISP). The Town of Erie, acting by and through its Erie Water Activity Enterprise ("Erie"), is participating in the project for a permitted firm yield of 6,500-acre feet per year of water for future water demands.

NISP is a water project coordinated by NCWCD to develop additional water resources for participant water providers within northern Colorado. Erie has participated in this group for the past eleven years to cooperatively investigate (Phase I), evaluate (Phase II) and commence permitting activities with the U.S. Army Corp of Engineers (Phase III) for a new water supply to meet part of the Town's anticipated future water demands.

Phase I of NISP investigated Poudre River and South Platte River water rights and potential reservoir sites in the Poudre Basin. Phase II evaluated the reservoir sites, analyzed the alternatives, environmental studies, and financial alternatives. Phase III has commenced the permitting activities with the US Army Corp of Engineers and other agencies and other National Environmental Policy Act (NEPA) compliance activities. Phase 3A (2010 – 2015) consists of additional time for the same activities noted in Phase III.

Erie staff, with water resources and legal consultation, has determined that NISP has the potential to provide up to 6,500 acre-feet of firm annual water yield to partially meet Erie's projected, ultimate raw water demand. It could provide a good opportunity to acquire a large portion of Erie's water supply and flexibility within the NCWCD system with Erie's CBT and Windy Gap Units. Finally, water from NISP would be deliverable through the same facilities that deliver CBT and Windy Gap water to Erie, so separate delivery facilities would not be required.

Continued participation in NISP by Erie would be pursuant to the Tenth Interim Agreement between NCWCD and Erie (attached). The participants' contributions for 2015 are shown in Exhibit B to the Agreement.

Staff recommends that the Board of Trustees authorize this Agreement, which commits Erie to contribute \$260,000 for its continued participation in the Phase 3A of the NISP Project in 2015.

Board Goal

This serves the Board's goal for Infrastructure – Fund and provide essential infrastructure that corresponds with the planned rate of growth.

Staff Review:

_____ Town Attorney
_____ Town Clerk
_____ Community Development Director
_____ Finance Director
_____ Police Chief
 Public Works Director

Approved by:



A.J. Krieger
Town Administrator

ATTACHMENTS:

- a. Resolution 14-139
- b. Tenth Interim Agreement with the Northern Colorado Water Conservancy District, Northern Integrated Supply Project Water Activity Enterprise for Participation in the Northern Integrated Supply Project.

**RESOLUTION NO. 14-139
TOWN OF ERIE, COLORADO**

A RESOLUTION OF THE TOWN OF ERIE, COLORADO ACTING BY AND THROUGH ITS ERIE WATER ACTIVITY ENTERPRISE ("ERIE") TO CONTINUE ITS PARTICIPATION IN THE NORTHERN INTEGRATED SUPPLY PROJECT ("NISP"), PHASE 3A IN THE AMOUNT OF \$260,000; AND SETTING FORTH DETAILS IN RELATION THERETO.

WHEREAS, the Town of Erie, acting by and through its Erie Water Activity Enterprise ("Erie"), entered into "Ninth" Interim Agreement" with the Northern Colorado Water Conservancy District, acting by and through its Northern Integrated Supply Project Water Activity Enterprise ("NCWCD") on January 14, 2014 to develop a water project for the purpose of developing a new reliable water source for the beneficial use of the Town of Erie and other entities, which will divide the costs among the participants; and

WHEREAS, the Northern Integrated Supply Project ("NISP") is continuing Phase 3A, of the Project; and

WHEREAS, the Town of Erie Board of Trustees would like to approve continuing participation in the Tenth Interim Agreement, Phase 3A, which will consist of further agency consultation, permitting with the U.S. Army Corp of Engineers and other agencies, compliance with the National Environmental Policy Act and other requirements for federal permitting, field work and analysis for permitting, modeling , and other activities related to designing and permitting the Project.

WHEREAS, continuation and completion of Phase 3A of NISP on behalf of the participants will require continued funding from the participants.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE TOWN OF ERIE, COLORADO, AS FOLLOWS:

- Section 1.** That the Board of Trustees for the Town of Erie approve continued participation in Phase 3A by a payment in the amount of \$260,000 to NISP.
- Section 2.** The appropriate Town officers are hereby authorized to expend said funds to continue participation in Phase 3A.
- Section 3.** That entering into the agreement is found to be in the best interest of the Town of Erie, and necessary for the preservation of the public health and safety.

ADOPTED AND APPROVED THIS 9TH DAY OF DECEMBER, 2014, BY THE BOARD OF TRUSTEES OF THE TOWN OF ERIE, COLORADO.

TOWN OF ERIE, ACTING BY AND THROUGH ITS ERIE WATER ACTIVITY ENTERPRISE,

A COLORADO MUNICIPAL CORPORATION

BY: _____
Tina Harris, Mayor

ATTEST
BY:

Nancy J. Parker, C.M.C., Town Clerk

TENTH INTERIM AGREEMENT WITH THE
NORTHERN COLORADO WATER CONSERVANCY DISTRICT,
NORTHERN INTEGRATED SUPPLY PROJECT WATER ACTIVITY ENTERPRISE,
FOR PARTICIPATION IN THE
NORTHERN INTEGRATED SUPPLY PROJECT

This Agreement is made and entered into as of _____, 2015 by and between the Northern Colorado Water Conservancy District (a quasi-municipal entity and political subdivision of the State of Colorado), acting by and through its Northern Integrated Supply Project Water Activity Enterprise (a government-owned business within the meaning of Article X, Section 20(2)(d), of the Colorado Constitution, organized pursuant to C.R.S. §§ 37-45.1-101 et seq.), whose address is 220 Water Avenue, Berthoud, Colorado 80513 (the "NISP Enterprise"), and the Town of Erie, acting by and through its Erie Water Activity Enterprise, whose address is PO Box 750, Erie, CO 80516-0750 ("Participant").

Recitals

- A. The NISP Enterprise is developing a water project (the "Project") for the purpose of developing a new reliable water supply for the beneficial use of the Participant and other entities.
- B. Overall Project costs will be divided among the entities that participate in the Project.
- C. The First Phase of the Project consisted of preliminary studies to evaluate potential Poudre reservoir sites and the South Platte Water Conservation Project. The First Phase has been accomplished and there appear to be potential project configurations that may serve the needs of the Project.
- D. The Second Phase of the Project consisted of additional reservoir site evaluations, alternatives analysis, environmental studies, financial analyses, and related work. The Second Phase has been completed and the participants have selected alternatives that may serve the needs of the Project.
- E. The NISP Enterprise has commenced the Third Phase of the Project. The Third Phase, Years 1 and 2 (2004 and 2005), consisted of agency consultation, commencement of permitting with the U.S. Army Corps of Engineers and other agencies, commencement of compliance with the National Environmental Policy Act and other requirements for federal permitting, commencement of field work and analysis for permitting, modeling, and other activities related to designing and permitting the Project.
- F. The Third Phase, Year 3 through Year 6 (2006, 2007, 2008, and 2009), consisted of continuation of agency consultation, permitting with the U.S. Army Corps of Engineers and other agencies, compliance with the National Environmental Policy Act and other requirements for federal permitting, field work and analysis for permitting, modeling, and other activities related to designing and permitting the Project.

- G. The Third Phase, Years 7 through 12 (hereinafter referred to as “Phase 3A”), will consist of further agency consultation, permitting with the U.S. Army Corps of Engineers and other agencies, compliance with the National Environmental Policy Act and other requirements for federal permitting, field work and analysis for permitting, modeling, and other activities related to designing and permitting the Project.
- H. It is necessary that the NISP Enterprise pursue Phase 3A of the Project at this time in order to be able to complete the Project on the time schedule desired by the participants.
- I. Continuation and completion of the Third Phase of the Project on behalf of the participants will require continued funding from the participants.

Agreement

1. Participant agrees to participate in Phase 3A of the Project to continue agency consultation, permitting work with the U.S. Army Corps of Engineers and other agencies, compliance with the National Environmental Policy Act and other requirements for federal permitting, field work and analysis for permitting, modeling, and other activities related to designing and permitting the Project, under and pursuant to the terms and conditions of this Agreement. Participant acknowledges that it shares a common interest in development of the Project and that privileged material may be shared with the Participant from time to time. A description of Phase 3A is included in Exhibit A. Participation in Phase 3A of the Project in no way obligates Participant to subsequent phases of the Project or to continue involvement in the Project in any manner.
2. For the purposes of cost allocation in Phase 3A, the cost is based upon the Participant’s base requested capacity divided by the total requested base Project yield. The Participant’s initial base requested capacity in the Project is 6500 acre-feet of water yield. Attached hereto as Exhibit B is a table showing the currently anticipated permitted capacity in the Project and the pro rata share of the costs of Phase 3A of the Project for 2015 for each Participant. The Participant may request a reduction, but not an increase, in base requested capacity, which will be implemented by the NISP Enterprise so long as any increased costs of design, environmental studies, permitting or other matters are paid by the Participant. If a reduction in Participant’s base requested capacity is made, the formula for allocation of costs among the participants shall be changed accordingly so that all participants bear a pro rata share of Phase 3A costs of the Project after the change based on their final base requested capacity. For purposes of the environmental analysis for the Project, the Participant’s permitted capacity in the Project is 6500 acre-feet of water yield. In the event that Participant’s base requested capacity is increased or decreased, Participant’s permitted capacity shall be increased or decreased in the same percentage as the percentage increase or decrease of the base requested capacity.
3. Participant agrees to provide to the NISP Enterprise funds for its pro rata share of the anticipated 2015 costs necessary for Phase 3A of the Project. The NISP Enterprise estimates that Participant’s pro rata share of the costs of Phase 3A of the Project is

\$260,000 for 2015. Participant will pay the NISP Enterprise its pro rata share of Phase 3A 2014 costs on or before January 15, 2015. These estimated costs will not be increased or exceeded without the prior written approval of Participant. However, if Phase 3A of the Project cannot be completed within these estimated costs, the NISP Enterprise is not obligated to complete Phase 3A of the Project for the benefit of Participant unless sufficient additional pro rata funds as determined by the NISP Enterprise are provided by Participant. Any participant which joins the Project after this Agreement is executed and is not listed in Exhibit B will be charged the same cost per acre foot of Project yield for the Third Phase as all other participants. Participant funds that are not expended during Phase 3A will be rebated back to each participant pro rata based on each participant's contribution of funds to the Project in Phase 3A.

4. In the event that Participant fails to make the payment set forth above at the specified time, the NISP Enterprise shall have the right to terminate this Agreement and cease all work on the Project for the benefit of Participant. The NISP Enterprise shall give Participant thirty (30) days' advance written notice of its intention to terminate this Agreement and cease work on the Project for Participant's benefit under this paragraph. Participant shall have until the end of said 30-day period in which to make all past due payments in full in order to cure its default hereunder. Participant shall in any event be responsible for its pro rata share of the 2015 costs of Phase 3A of the Project actually incurred by the NISP Enterprise up to the date of termination of this Agreement.
5. The NISP Enterprise agrees to diligently pursue Phase 3A of the Project in good faith to the extent that funds therefor are provided by the Participant under this Agreement and by other participants under similar agreements. By entering into this Agreement and accepting payments from Participant, the NISP Enterprise does not obligate itself to, nor does the NISP Enterprise warrant, that it will proceed with the Project beyond Phase 3A or that it will construct or operate the Project. At the end of the Third Phase, the NISP Enterprise will determine after consultation with the participants whether to proceed with the Project. The NISP Enterprise agrees that, if the participants provide all required funding, if the NISP Enterprise has the ability, and if the Project is feasible and practical, it will pursue the construction and operation of the Project if requested to do so by sufficient participants to fully fund the Project. In the event that the NISP Enterprise decides not to proceed with the Project, it will so notify Participant and this Agreement will immediately and automatically terminate upon the giving of such notice.
6. In the event of termination of the Project, Participant shall not be entitled to any return of funds paid to the NISP Enterprise for the Project, unless payments by participants exceed the NISP Enterprise's costs, in which case a pro rata refund will be made. In the event of such termination, Participant shall be entitled to receive copies of any work products developed by the NISP Enterprise or its consultants on behalf of Participant, and NISP Enterprise shall convey to Participant, as a tenant in common with all other participants who have not been terminated under paragraph 4 above, a pro rata interest in all real and personal property acquired by the NISP Enterprise for the Project with funds provided under this Agreement or similar agreements with other participants.

7. Participant shall have the right to assign this Agreement and Participant's rights hereunder, with the written consent of the NISP Enterprise, which consent shall not be unreasonably withheld, to any person or entity that is eligible to receive water deliverable through the Project and that is financially able to perform this Agreement.
8. In the event that this Agreement is terminated for any reason, Participant shall not be entitled to any return of any funds paid to the NISP Enterprise for the Project, and the NISP Enterprise shall have no further obligations to Participant, except as provided in Paragraphs 3 and 6 above for those participants who have not been terminated under paragraph 4 above.
9. Notwithstanding any other provision of this Agreement to the contrary, the Participant's maximum financial obligation under this Agreement shall be the payment of \$260,000 set forth in paragraph 3 above. The Participant shall have the right to terminate this Agreement at any time. In the event of such termination, each of the parties hereto shall be immediately released from all obligations recited herein as if this Agreement had not been entered into, except that Participant shall be entitled to a return of funds paid to the NISP Enterprise as provided in paragraph 8 above.
10. In the event that additional costs must be incurred for Phase 3A in 2015, the parties may amend this Agreement in writing to provide for further payment by Participant of Phase 3A costs for 2014. However, Participant is not obligated under this Agreement to pay any costs for Phase 3A beyond the costs stated in paragraph 3 above.
11. This Agreement is the entire agreement between the NISP Enterprise and Participant regarding participation in Phase 3A of the Project and shall be modified by the parties only by a duly executed written instrument approved by Participant and the NISP Enterprise's Board of Directors.
12. This Agreement is subject to approval by the NISP Enterprise's Board of Directors and shall become binding on the NISP Enterprise only upon such approval.

TOWN OF ERIE, ACTING BY AND THROUGH ITS ERIE WATER ACTIVITY
ENTERPRISE

By: _____

Name: _____

Title: _____

NORTHERN COLORADO WATER
CONSERVANCY DISTRICT, ACTING BY AND THROUGH THE NORTHERN
INTEGRATED SUPPLY PROJECT WATER ACTIVITY ENTERPRISE

By: _____

Name: _____

Title: _____

EXHIBIT A
DESCRIPTION OF PHASE 3A
NORTHERN INTEGRATED SUPPLY PROJECT

Phase 3A consists of a continuation of the permitting work associated with NISP. The work in 2015 will largely be efforts in support of the completion of the Supplemental Draft EIS, technical analyses required for the Final EIS, work in support of development of the Final EIS itself, mitigation development, preparation of the State of Colorado 401 Certification documents, and development of the State of Colorado Fish and Wildlife Mitigation Plan. Additionally, there will be work in support of the public information effort for NISP as well as overall Northern Water administration and legal support.

EXHIBIT B
PARTICIPANT YIELD AND COSTS
PHASE 3A

Participant Cost Allocation For 2015 Permitting \$1,600,000 Request

Participant	Project Yield (Acre-ft)	Percent of Project	Additional Budget Request
Central Weld Co. W.D.	3,500	8.75%	\$ 140,000
Dacono	1,000	2.50%	\$ 40,000
Firestone	1,300	3.25%	\$ 52,000
Frederick	2,600	6.50%	\$ 104,000
Eaton	1,300	3.25%	\$ 52,000
Erie	6,500	16.25%	\$ 260,000
Evans	1,600	4.00%	\$ 64,000
Fort Collins-Loveland. W.D.	3,000	7.50%	\$ 120,000
Fort Lupton	3,000	7.50%	\$ 120,000
Fort Morgan	3,600	9.00%	\$ 144,000
Lafayette	1,800	4.50%	\$ 72,000
Lefthand W.D.	4,900	12.25%	\$ 196,000
Morgan County Q.W.D.	1,300	3.25%	\$ 52,000
Severance	1,300	3.25%	\$ 52,000
Windsor	3,300	8.25%	\$ 132,000
Total	40,000	100.00%	\$ 1,600,000

RESOLUTION NO. 14-140
Series of 2014

A RESOLUTION AUTHORIZING THE TOWN OF ERIE, COLORADO, TO ENTER INTO A THIRD AMENDMENT TO EMPLOYMENT AGREEMENT WITH ARTHUR J. KRIEGER; AUTHORIZING AND DIRECTING THE APPROPRIATE TOWN OFFICERS TO SIGN SAID THIRD AMENDMENT TO EMPLOYMENT AGREEMENT; AND, SETTING FORTH DETAILS IN RELATION THERETO.

WHEREAS, the Town of Erie, Colorado wishes to enter into a Third Amendment to Employment Agreement with Arthur J. Krieger for his employment as Town Administrator; and

WHEREAS, the Board of Trustees of the Town of Erie believes it is in the best interest of the Town to enter into the Third Amendment to Employment Agreement.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE TOWN OF ERIE, COLORADO, AS FOLLOWS:

Section 1. That the Third Amendment to Employment Agreement between the Town of Erie and Arthur J. Krieger, a copy of which is attached hereto and incorporated herein by reference, is found to be a reasonable and acceptable agreement for his employment as Town Administrator.

Section 2. That the Town of Erie be and is hereby authorized and directed to enter into the Third Amendment to Employment Agreement, and the appropriate Town officers are hereby authorized and directed to sign and bind the Town of Erie to said Third Amendment to Employment Agreement.

Section 3. That entering into the Third Amendment to Employment Agreement is found to be in the best interest of the Town of Erie, and necessary for the preservation of the public health and safety.

ADOPTED AND APPROVED THIS 9TH DAY OF DECEMBER, 2014 BY THE BOARD OF TRUSTEES OF THE TOWN OF ERIE, COLORADO.

TOWN OF ERIE,
a Colorado municipal corporation

By: _____
Tina Harris, Mayor

ATTEST:

By: _____
Nancy J. Parker, Town Clerk

**THIRD AMENDMENT OF
EMPLOYMENT AGREEMENT**

THIS THIRD AMENDMENT OF EMPLOYMENT AGREEMENT ("Third Amendment") is made and entered into this 9th day of December, 2014, effective as of August 1, 2014 (the "Effective Date"), by and between the **TOWN OF ERIE**, a Colorado municipal corporation, hereinafter referred to as "Town" and **ARTHUR J. KRIEGER**, hereinafter referred to as both "Arthur J. Krieger" and as the "Town Administrator."

WHEREAS, the Town previously entered into an Employment Agreement with Arthur J. Krieger as Town Administrator of the Town of Erie, Colorado, which Employment Agreement was entered into and dated June 14, 2011, and effective as of August 1, 2011 (hereinafter the "Original Employment Agreement"); and,

WHEREAS, the Town and Arthur J. Krieger previously entered into a First Amendment of Employment Agreement dated September 11, 2012, and effective as of September 11, 2012 (hereinafter the "First Amendment"), the Original Employment Agreement and the First Amendment hereinafter referred to together as the "Employment Agreement;" and,

WHEREAS, the Town and Arthur J. Krieger previously entered into a Second Amendment of Employment Agreement dated August 17, 2013, and effective as of August 1, 2013 (hereinafter the "Second Amendment"), the Original Employment Agreement, the First Amendment and the Second Amendment hereinafter referred to together as the "Employment Agreement;" and,

WHEREAS, the Town and the Town Administrator now desire to amend the Employment Agreement as set forth in this Third Amendment.

NOW THEREFORE, in consideration of the following mutual covenants and conditions the parties hereto agree as follows:

1. Terms and words used herein shall have the same definition and meaning as those terms and words set forth and defined in the Employment Agreement unless specifically stated otherwise herein.

2. Paragraph 3, "Compensation," of the Employment Agreement shall be deleted in its entirety and replaced with the following new Paragraph:

3. Compensation. The Town agrees to pay to the Town Administrator for his services rendered pursuant hereto an annual base salary of One Hundred Sixty Thousand Dollars (\$160,000.00), payable in installments at the same time as other employees of the Town are paid. In addition, the Town agrees to increase said salary and/or other benefits of the Town Administrator in such amounts and to such extent as the Board of Trustees may determine that it is desirable to do so on the basis of an annual review of performance of said Town Administrator.

The position of Town Administrator is a non-covered position under the provisions of the Fair Labor Standards Act. As such, the Town Administrator shall not be bound by the record keeping or overtime provisions of the Act.

3. In the event of any conflict, inconsistency or incongruity between the provisions of this Third Amendment and any of the provisions of the Employment Agreement, the provisions of this Third Amendment shall in all respects govern and control.

4. Except as specifically amended herein, all other terms and conditions of the Employment Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, the parties have caused this First Amendment of Employment Agreement to be signed and executed on the day and year first above written.

**TOWN OF ERIE,
a Colorado municipal corporation**

TOWN ADMINISTRATOR

By: _____
Tina Harris, Mayor

By: _____
Arthur J. Krieger

ATTEST:

By: _____
Nancy Parker, Town Clerk

TOWN OF ERIE
BOARD OF TRUSTEE AGENDA ITEM
Board Meeting Date: December 9, 2014

SUBJECT: **PUBLIC HEARING - RESOLUTION**
Consideration of Resolution 14-131: A Resolution Establishing And Certifying The Property Taxes For The Town Of Erie, Colorado, In Weld And Boulder Counties For The Year 2015

DEPARTMENT: Finance

PRESENTER: **Steve Felten**
Director of Finance

FISCAL INFORMATION: Cost as Recommended:
Balance Available:
Budget Line Item
Number: 000 . 00 . 000 . 000000 . 000000
New Appropriation Required: Yes No

STAFF RECOMMENDATION: Staff recommends the Board of Trustees approve the resolution that certifies the mill levy for 2015

SUMMARY AND BACKGROUND OF SUBJECT MATTER:

The Town of Erie's assessed valuation has increased from \$241,094,493 in 2014 to \$244,874,609 for 2015. This change represents an increase of 1.6% in assessed valuation.

Pursuant to Colorado State Statues, we have calculated the 2015 Operating Mill Levy to be 7.288. This property tax rate is the same as the 2014 Operating Mill Levy.

Erie voters approved an additional mill levy for trails and natural areas beginning in the 2005 Tax Collection Year. This shall be certified to each county as 4.000 mills for the 2015 Tax Collection Year. The purpose of this mill levy is the construction and acquisition of trails and natural areas. Beginning in 2015 revenues arising from this mill levy may also be used for qualifying maintenance expenses.

In addition, Erie voters approved an additional mill levy in 2006 for debt service on the general obligation bonds for the Erie Community Center. The bonds were originally issued in July 2006 and the first debt service payment was due in 2007. The bonds were partially refunded in 2013. This mill levy shall be certified to each county as 5.198 mills for the 2015 Tax Collection Year (a decline of 2.122 mills since the original levy).

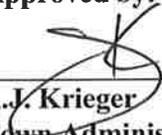
In 2014, Erie voters also approved an additional mill levy for debt service on the general obligation bonds issued to fund construction of a new public safety facility. This mill levy shall be certified to each county as 0.878 mills for the 2015 collection year. This mill levy is less than the mill levy assumed in the ballot question. The total mill levy for general obligation bond debt service for the community center bonds and the public safety facility bonds for 2015 will be 6.076 mills.

The total mill levy certified to each county is 17.364 for the 2015 Tax Collection Year. This represents an increase of 0.797 in mill levy from the 2014 Tax Collection Year. This increase is due to the new 0.878 mill levy for the public safety facility bonds.

Staff Review:

_____ Town Attorney
_____ Town Clerk
_____ Community Development Director
57 Finance Director
_____ Police Chief
_____ Public Works Director

Approved by:



A.J. Krieger
Town Administrator

ATTACHMENTS:

- a. Resolution 14-131
- b. Certification of Tax Levies for Boulder and Weld Counties

RESOLUTION NO. 14-131

**A RESOLUTION ESTABLISHING AND CERTIFYING THE
PROPERTY TAXES FOR THE TOWN OF ERIE, COLORADO,
IN WELD COUNTY AND IN BOULDER COUNTY FOR THE
YEAR 2015.**

WHEREAS, a Public Hearing was held by the Board of Trustees of the Town of Erie at the Erie Town Hall, 645 Holbrook, Erie, Colorado, on the 9th day of December, 2014.

NOW, THEREFORE, BE IT RESOLVED AND ORDERED BY THE BOARD OF TRUSTEES OF THE TOWN OF ERIE THAT, upon the valuation of assessable property in the Town of Erie as certified by the County Assessors for the current year, there be and is hereby levied for:

General Operating Expenses	7.288 Mills
General Obligation Bond Debt Service	6.076 Mills
Trails and Natural Areas	4.000 Mills

Total **17.364 Mills**

The County Commissioners are hereby authorized and directed to extend said mill levy upon their tax list.

ADOPTED AND APPROVED THIS 9TH DAY OF DECEMBER, 2014, BY THE BOARD OF TRUSTEES OF THE TOWN OF ERIE, COLORADO.

TOWN OF ERIE
a Colorado municipal corporation

Tina Harris, Mayor

ATTEST:

Nancy Parker, Town Clerk

**TOWN OF ERIE
BOARD OF TRUSTEE AGENDA ITEM**

Board Meeting Date: December 9, 2014

SUBJECT: **ORDINANCES**
Ordinance 38-2014; An Ordinance Of The Town Of Erie, Colorado Approving An Option To Purchase Agreement By And Among Brothers Redevelopment, Inc., The Town Of Erie And The Erie Housing Authority Providing For The Transfer Of All Assets Of The Erie Housing Authority And The Transfer Of Certain Real Property From The Town Of Erie To Brothers Redevelopment, Inc.; Setting Forth Details In Relation Thereto; And, Declaring An Emergency Therefore.

DEPARTMENT: Finance

PRESENTER: Steve Felten, Director of Finance

FISCAL INFORMATION: Cost as Recommended: N/A
Balance Available:
Budget Line Item Number:
New Appropriation Required: Yes No

STAFF RECOMMENDATION: Second Reading – request for board approval.

SUMMARY AND BACKGROUND OF SUBJECT MATTER:

Background

The Town established the Erie Housing Authority (EHA) in 1999 and built a 12-unit senior housing complex in 2001. From January 2002 through November 2012 the complex was managed by the Boulder County Housing Authority. Since then the property has been managed by Pillar Management, a partner of Brothers Redevelopment, Inc. (BRI)

Small housing authorities do not enjoy the same economies of scale experienced by larger authorities. As a result of this and other factors, the Town's housing authority has never had positive cash flow. In addition, the Town does not have the staff to properly manage and operate a housing authority that receives federal rent subsidies. As a result, the Town is working with BRI to expand the number of units and ultimately transfer ownership of the property to BRI.

BRI plans to finance the acquisition of authority-related assets with funds from either or both of the Colorado Housing and Finance Authority (CHFA) or the State of Colorado Division of Housing (DOH). Earlier in 2014 BRI submitted applications for an allocation of Low Income Housing Tax Credit (LIHTC) in both rounds for the 2014 allocation year. Allocation of these credits is a competitive process, with two rounds of applications each year.

BRI was unsuccessful in both application rounds in obtaining an LIHTC allocation, but CHFA staff encouraged BRI to pursue an alternative plan that would allow for the full planned expansion in one phase, with an alternative financing plan that would potentially include funding from both CHFA and the DOH. BRI is in the process of exploring project and financing plans to pursue these potential options, which will have application deadlines on various dates during 2015.

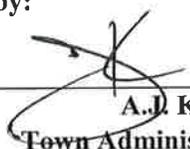
Under any of these financing scenarios, BRI is required to show that it either owns or has the right to acquire the property underlying the applications. To fulfill this requirement for the previous LIHTC applications, on February 25, 2014 the Board approved entering into an option agreement providing for the transfer of the buildings and land related to housing authority operations to BRI. This option agreement expired October 31, 2014. By approval of this ordinance the Town and the Housing Authority will execute a new option agreement with BRI with the same terms as the previous agreement, with an expiration date of December 31, 2015.

This is the second reading of this ordinance. Staff is requesting that it be passed by emergency. This is required due to the fact that for the application processes described above BRI must show it has ownership rights in the property as of December 31, 2014.

Staff Review:

- Town Attorney
- Town Clerk
- Community Development Director
- Finance Director
- Police Chief
- Public Works Director

Approved by:



A.J. Krieger
Town Administrator

**ATTACHMENTS: Ordinance 38-2014
Option Agreement with Brothers Redevelopment**

ORDINANCE NO. 38-2014
Series of 2014

AN ORDINANCE OF THE TOWN OF ERIE, COLORADO APPROVING AN OPTION TO PURCHASE AGREEMENT BY AND AMONG BROTHERS REDEVELOPMENT, INC., THE TOWN OF ERIE AND THE ERIE HOUSING AUTHORITY PROVIDING FOR THE TRANSFER OF ALL ASSETS OF THE ERIE HOUSING AUTHORITY AND THE TRANSFER OF CERTAIN REAL PROPERTY FROM THE TOWN OF ERIE TO BROTHERS REDEVELOPMENT, INC.; SETTING FORTH DETAILS IN RELATION THERETO; AND, DECLARING AN EMERGENCY THEREFORE.

WHEREAS, on March 23, 1999 the Town of Erie, Colorado approved Resolution 99-13 establishing the Erie Housing Authority (“EHA”) and authorizing and directing the Mayor to appoint commissioners and to act as an authority pursuant to Colorado Revised Statutes to make available to the inhabitants of the Town safe and sanitary dwelling accommodations through the EHA; and

WHEREAS, in 2001 the Town leased to the EHA certain real property (“Property”) to be used by the EHA for the construction and maintenance of senior housing; and

WHEREAS, in 2001 the EHA constructed a 12-unit senior housing complex site known as the Victor F. Smith Senior Housing Campus (“Senior Housing”) on the Property and borrowed funds for such construction; and

WHEREAS, in December, 2012 the EHA entered into a management agreement with Pillar Property Management acting on behalf of Brothers Redevelopment, Inc. to manage the Senior Housing and Pillar Property Management acting on behalf of Brothers Redevelopment, Inc. has demonstrated excellence in the operation, maintenance and management of the Senior Housing; and

WHEREAS, the Town and the EHA would like to have additional senior housing built on the Property and on property formerly known as the Oamek property (“Sale Property”), but do not have the financial means to build additional senior housing on the Sale Property nor the means to manage such housing; and

WHEREAS, Brothers Redevelopment, Inc. (“Brothers”) shares the desire to see additional senior housing built on the Sale Property, and Erie and the EHA recognize that the senior affordable housing needs of Erie would be best met if EHA’s assets are transferred to Brothers and the EHA operations are fully assumed by Brothers and the Sale Property is transferred to Brothers to allow for additional senior housing to be built; and

WHEREAS, Brothers plans to finance the acquisition of the Sale Property and the renovation and expansion of the Senior Housing with and with State Division of Housing funds and in part with a Low Income Housing Tax Credit (“LIHTC”) allocation from the Colorado Housing and Finance Authority (“CHFA”), which LIHTC allocation is a competitive process; and

WHEREAS, for the State Division of Housing funds and the LIHTC allocation Brothers is required to show that it either owns or has the right to acquire the Sale Property by means of an option agreement; and

WHEREAS, the Board of Trustees of the Town of Erie believes it is in the best interest of the Town to enter into an Option to Purchase Agreement (“Agreement”) with the EHA and Brothers in order to transfer the Sale Property to Brothers along with the assets of the EHA, and that such an amendment is necessary to the immediate preservation of the public property, health, safety, and welfare of the Town and for the financial well being of the Town.

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF TRUSTEES OF THE TOWN OF ERIE, COLORADO, AS FOLLOWS:

Section 1. That the Agreement by and among the Town, the EHA and Brothers, a copy of which is attached hereto and incorporated herein by this reference, is found to be a reasonable and acceptable agreement for the transfer of the Town’s Sale Property to Brothers along with the assets of the EHA.

Section 2. That the Town of Erie be and is hereby authorized and directed to enter into the Agreement, and the appropriate Town officers are hereby authorized and directed to sign and bind the Town of Erie to said Agreement and to transfer the Sale Property to Brothers pursuant to the terms of the Agreement.

Section 3. Severance Clause. If an article, section, paragraph, sentence, clause or phrase of this Ordinance is held to be unconstitutional or invalid for any reason, such decision shall not affect the validity or constitutionality of the remaining portions of this Ordinance. The Board of Trustees of the Town of Erie, Colorado hereby declares that it would have passed this Ordinance and each part or parts thereof, irrespective of the fact that any one part or parts may be declared invalid or unconstitutional.

Section 4. Repeal. All other ordinances, or parts of any ordinances or other Code provisions in conflict herewith are hereby repealed.

Section 5. Reason for Emergency. Brothers plans to finance the acquisition of the Sale Property and the renovation and expansion of the Senior Housing State Division of Housing funds and in part with a LIHTC allocation from CHFA. The LIHTC allocation is a competitive process with application deadlines to obtain the funding. In order for Brothers to acquire the LIHTC allocation, Brothers is required to show that it either owns or has the right to acquire the Sale Property by means of an option agreement. The executed Agreement is needed prior to December 31, 2014 so that Brothers may make the application to CHFA for the funds necessary to complete the acquisition of the Sale Property and the renovation and expansion of the Senior Housing.

Section 6. Emergency Declared. For the reasons stated herein, the Board of Trustees for the Town of Erie, Colorado hereby declares an emergency to exist concerning the subject matter of this Ordinance and its immediate effect is necessary in order to preserve and protect the public property, health, safety, and welfare of the Town and for the financial well being of the Town.

Section 7. The within emergency ordinance shall take effect upon final adoption.

**INTRODUCED, PASSED, ADOPTED AND APPROVED AS AN EMERGENCY ORDINANCE,
AND ORDERED PUBLISHED IN FULL BY THE BOARD OF TRUSTEES OF THE TOWN OF ERIE
THIS ____ DAY OF _____, 2014.**

PUBLISHED IN FULL ON THE ____ DAY OF _____, 2014.

TOWN OF ERIE, COLORADO,
a Colorado municipal corporation

By: _____
Tina Harris, Mayor

ATTEST:

By: _____
Nancy Parker, Town Clerk

OPTION TO PURCHASE AGREEMENT

THIS OPTION TO PURCHASE AGREEMENT ("Agreement") is made and entered into this ____ day of _____, 2014 (the "Effective Date") by the Town of Erie, a Colorado municipal corporation ("Erie"), and the Housing Authority of the Town of Erie ("EHA"), (collectively the "Owners"), and Brothers Redevelopment, Inc., a Colorado nonprofit corporation, hereinafter referred to as "Brothers."

WHEREAS, Erie owns the real property know as Tracts A and B, Erie Senior Housing Erie, Colorado and five (5) subdivided vacant building lots known as Lots 2, 3, 4, 5, and 6, Oamek Subdivision, Erie, Colorado, the properties more particularly described on Exhibit "A," attached hereto and incorporated herein by this reference (the "Property"); and,

WHEREAS, EHA owns the personal property attached to the Property consisting of Twelve (12) Senior Housing Units more particularly described on Exhibit "B," attached hereto and incorporated herein by this reference (the "Units"); and,

WHEREAS, Brothers and Owners previously entered into an option agreement, dated February 25, 2014 whereby Brothers obtained an option to purchase the Property and the Units, however said option to purchase expired on October 31, 2014; and,

WHEREAS, Brothers still desires to purchase from Owners and Owners still desire to sell to the Brothers an option to purchase the Property and the Units on terms as set forth hereinafter (the "Option").

NOW, THEREFORE, in consideration of the mutual promises, covenants, payment, and obligations of the parties hereto, the terms, covenants and conditions hereof, and intending to be legally bound, the parties agree as follows:

1. Grant of Option to Purchase. In consideration for Brothers' payment of Ten Dollars (\$10.00) to Erie and Ten Dollars (\$10.00) to EHA, the receipt and sufficiency of which is hereby acknowledged by Owners (together referred to as the "Option Money"), Owners hereby grant to Brothers the exclusive option to purchase upon the following terms and conditions the Property and the Units owned by Owners except as may be hereinafter provided. The Option Money shall be applied to the Purchase Price (as defined below) at Closing (as defined below).

2. Option Period. This Option shall run for a period of beginning on the Effective Date and terminating at midnight on the 31st day of December, 2015 (the "Option Period").

3. Exercise of Option; Conditions. This Option may be exercised by Brothers at any time during the Option Period, so long as the following two conditions are first met: this Option is specifically contingent upon 1) Brothers' successfully obtaining a Colorado Housing and Finance Authority ("CHFA") 9% Low Income Housing Tax Credit reservation for the project set forth and described in Exhibit "C," attached hereto and incorporated herein by this reference (the

“Project”), and 2) Brothers committing to the Owners to construct the Project following the purchase of the Property and Units. Brothers shall exercise the Option by delivering written notice of the following to the Owners: proof of obtaining the CHFA 9% Low Income Housing Tax Credit reservation and election to exercise the Option. At the time of the exercise of the Option, Brothers shall further execute a warranty, in form acceptable to the Owners, of Brothers commitment to construct the Project in conformance with the terms, conditions and restrictions contained in this Agreement following the purchase of the Property and Units. Failure to so construct the Project as committed shall result in Brothers’ forfeiture of the Property and the Units back to Owners, as provided for in Paragraph 4.J and K., below.

4. Contract Upon Exercise of Option. If Brothers exercises this Option within the Option Period as required by Paragraph 3, above, this Option shall become an agreement for sale and purchase (“Contract”) between Owners and Brothers whereby Owners agree to sell and Brothers agrees to purchase the Property and Units upon the terms and conditions stated herein below in this Option.

A. The purchase price shall be as follows: Four Hundred Eighty Thousand Dollars (\$480,000.00) (the “Purchase Price”). The Purchase Price is based upon the Pinnacle Valuation and Consulting LLC restricted use appraisal of the Property and the Units, dated February 7, 2014. The Purchase Price, shall be payable as follows: the Purchase Price, plus or minus closing adjustments shall be paid at the time of closing. All funds paid shall be in funds available for immediate withdrawal.

B. The Purchase Price shall include all fixtures, improvements and personal property presently located on the Property and Units conveyed free and clear of all taxes, liens and encumbrances. Any personal property shall be conveyed by bill of sale.

C. A current commitment for title insurance policy issued by Stewart Title, Longmont, Colorado, in an amount equal to the Purchase Price, at Owners’ expense, shall be furnished to the Brothers upon the exercise of the Option. Brothers will pay the premium on the title insurance policy and arrange for delivery of the title insurance policy to Brothers after Closing.

D. The closing and date for delivery of deed (“Closing”) shall be not later than twelve (12) months after the date on which notice of exercise of the Option is given to Owners by Brothers. The hour of Closing shall be determined by mutual agreement of the parties. The Closing shall be held at the offices of Stewart Title, Longmont, Colorado.

E. Title shall be merchantable in Owners. Subject to payment or tender as above provided, Erie shall execute and deliver a good and sufficient SPECIAL WARRANTY DEED to Brothers conveying the Property free and clear of all taxes, except the general real estate taxes for the year of closing, as applicable, and free and clear of all liens, mortgages, deeds of trust, and encumbrances except those that may be permitted by Brothers following review of the title commitment and those liens, mortgages, deeds of trust, and encumbrances to be assumed by Brothers as part of the Purchase Price. Subject to payment or tender as above provided, EHA shall execute and deliver a good and sufficient BILL OF SALE to Brothers conveying the Units.

F. Except as stated in Paragraph 4.E., above, if title to the Property or Units is not merchantable, or if there are title defect(s), and written notice of defect(s) is given by Brothers or Brothers' agent to Owners or Owners' agent on or before date of closing, Owners shall use reasonable effort to correct said defect(s), at no material cost to Owners, prior to date of closing. If Owners are not able to correct said defect(s) on or before date of closing, the date of closing shall be extended thirty (30) days for the purpose of allowing Owners to correct said defect(s). Any uncorrected title defect(s) must be acceptable to Brothers, in their sole and reasonable discretion.

G. General real estate taxes, as applicable, and all utility charges shall be prorated to the date of closing. Closing costs shall be shared equally between the Owners and Brothers. Brothers shall be responsible solely for any sales and use tax that may accrue because of this transaction.

H. Any encumbrance on the Property and the Units at the time of settlement shall be assumed by Brothers as part of the Purchase Price at Closing as provided for herein. All such encumbrances are more fully set forth in Exhibit "D." attached hereto and incorporated herein by this reference (the "Accepted Encumbrances").

I. Possession of the Property and Units shall be delivered to Brothers on the date and time of Closing.

J. In the event Brothers shall fail or refuse to construct the Project within twelve (12) months following the purchase of the Property and Units, then, in that event, Brothers shall forfeit the Property and the Units and Brothers shall transfer the Property and Units back to Owners, and Owners shall return the Purchase Price to Brothers.

K. If any payment due hereunder is not paid, honored or tendered when due, or if any other obligation hereunder is not performed as herein provided, there shall be the following remedies:

(i) IF BROTHERS IS IN DEFAULT, then all payments and things of value received hereunder shall be forfeited by Brothers and retained on behalf of Owners, with the exception of the Purchase Price which, if paid by Brothers, shall be returned to Brothers upon return of the by Brothers of the Units and the Property to Owners, and both parties shall thereafter be released from all obligations hereunder. It is agreed that such payments and things of value are liquidated damages and are the Owners' sole and only remedy for the Brothers' failure to perform the obligations of this Agreement and the Contract. Owners shall have the remedies of specific performance to regain possession of the Property and the Units, and additional damages, in the event Brothers fails to construct the Project as required herein.

(ii) IF OWNERS ARE IN DEFAULT, (a) Brothers may elect to treat this Agreement as terminated in which case the Brothers may recover the return of the Option Money; or (b) the Brothers may elect to treat this Agreement and the Option contained herein and the Contract as being in full force and effect and Brothers shall have the right to an action for specific performance.

(iii) Anything to the contrary herein notwithstanding, in the event of any litigation arising out of this Agreement or the Contract, the court shall award to the substantially prevailing party all reasonable costs and expenses including attorney fees. The laws of the State of Colorado shall govern the interpretation, validity, performance and enforcement of this Agreement and the Contract. For the resolution of any dispute arising hereunder, venue shall be in the courts of the County of Weld, State of Colorado.

L. Owners shall cooperate with Brothers to the extent allowed by law in order to allow Brothers to construct the Project within the specified period of time required within this Agreement.

M. Brothers understands and agrees that the Property and the Units are encumbered by and subject to agreements and notes which contain certain binding requirements, conditions and responsibilities. Brothers agrees to assume all such agreements and notes along with the binding requirements, conditions and responsibilities set forth therein at the time of Closing and purchase of the Property and Units. The agreements and notes are as follows:

(i) State of Colorado Housing Grant Contract, dated May 9, 2000, between the Department of Local Affairs, Division of Housing and the Erie Housing Authority;

(ii) Affordable Housing Program Agreement for Rental Project, dated December 15, 2000, among the Federal Home Loan Bank of Topeka, Heritage Bank and the Erie Housing Authority;

(iii) Promissory Note for \$60,000, dated March, 2001, by the Erie Housing Authority, Borrower, payable to Heritage Bank, Payee; and

(iv) Agreement Concerning the AHP Loan, dated March, 2001, between the Erie Housing Authority, and Heritage Bank.

Said agreements and notes are marked Exhibit "E," attached hereto and incorporated herein by this reference (the "Agreements and Notes").

N. The provisions of this Agreement shall survive the Closing of this Agreement.

5. Assignment. This Agreement and the Option contained herein may not be assigned by Brothers without the prior written consent of Owners, which consent may be withheld at the option of Owners.

6. Failure to Exercise Option. If Brothers fails to exercise the Option within the Option Period, this Option shall automatically terminate.

7. No Sale During Option Period. Other than the Option and terms set forth herein, Owners shall not sell or exchange the Property or Units or any part thereof, nor shall the Owners enter into any sale, option, exchange or trade agreement or contract for any or all of the Property

or the Units for the duration of the Option Period.

8. Notices. Any notices required or permitted hereunder shall be sufficient if personally delivered or sent by certified mail, return receipt, addressed as follows:

If to Owners:

Town of Erie
650 Holbrook Street
P.O. Box 750
Erie, Colorado 80516
Attn: Town Administrator

If to the Brothers:

Brothers Redevelopment, Inc.
2200 Eaton Street, Suite B
Denver, Colorado 80214
Attn: Executive Director

Notice personally delivered shall be effective upon delivery. Mail notice shall be effective three (3) business days after mailing.

9. Recording of Agreement. Brothers may record this Agreement, at the sole decision of Brothers, in the office of the Clerk and Recorder, County of Weld, State of Colorado, and Brothers shall retain the recorded Agreement.

10. Paragraph Headings. Paragraph headings are inserted for convenience only and in no way limit or define the interpretation to be placed upon this Agreement.

11. Binding Agreement. This Agreement shall be binding upon and for the benefit of the parties hereto, their successors and assigns.

12. Terms Shall Survive Closing. The terms and provisions of this Agreement and of the Contract shall survive the Closing and delivery of the deed. The provisions of Paragraph 4.J. shall be enforceable by specific performance.

[Signatures on following page]

IN WITNESS WHEREOF, the parties have executed this Option To Purchase Agreement on the date and year first above written.

OWNERS:

TOWN OF ERIE, a Colorado municipal corporation

By: _____
Tina Harris, Mayor

ATTEST:

By: _____
Nancy Parker, Secretary

HOUSING AUTHORITY OF THE TOWN OF ERIE

By: _____
Tina Harris, Chairman

ATTEST:

By: _____
Nancy Parker, Secretary

10/27/14

BROTHERS:

BROTHERS REDEVELOPMENT, INC., a Colorado nonprofit corporation

By: _____
_____, President

ATTEST:

By: _____
_____, Secretary

EXHIBIT "A"

[Property description]

Tracts A and B, Erie Senior Housing, Town of Erie, County of Weld, State of Colorado

And

Lots 2, 3, 4, 5, and 6, Oamek Subdivision, Town of Erie, County of Weld, State of Colorado

EXHIBIT "B"

[Units description]

TRACT A, ERIE SENIOR HOUSING, COUNTY OF WELD, STATE OF COLORADO.
800 HIGH ST., ERIE, CO - THE ERIE SENIOR HOUSING UNITS CONSISTING OF
TWELVE (12) UNITS NUMBERED; 101, 102, 103, 104, 105, 106, 201, 202, 203, 204, 205,
206.

EXHIBIT “C”

[Project description]

Brothers Redevelopment, Inc. will acquire the existing 12-unit affordable senior rental property known as Victor Smith Senior Housing as well as all vacant land as more fully described in Exhibit A herein. Upon approval of a CHFA 9% LIHTC reservation, Brothers will conduct improvements to the existing 12-units, and will construct an additional 18 units on a portion of the acquired vacant land.

EXHIBIT "D"

[Accepted Encumbrances]

—
—
—

And

The Agreements and Notes set forth on Exhibit E.

EXHIBIT "E"

[Agreements and Notes]

(i) State of Colorado Housing Grant Contract, dated May 9, 2000, between the Department of Local Affairs, Division of Housing and the Erie Housing Authority;

(ii) Affordable Housing Program Agreement for Rental Project, dated December 15, 2000, among the Federal Home Loan Bank of Topeka, Heritage Bank and the Erie Housing Authority;

(iii) Promissory Note for \$60,000, dated March, 2001, by the Erie Housing Authority, Borrower, payable to Heritage Bank, Payee; and

(iv) Agreement Concerning the AHP Loan, dated March, 2001, between the Erie Housing Authority, and Heritage Bank.

TOWN OF ERIE
BOARD OF TRUSTEE AGENDA ITEM
Board Meeting Date: December 9, 2014

SUBJECT: GENERAL BUSINESS

Sierra Vista Sketch Plan Review - A Sketch Plan represents a generalized land use plan and layout for the area proposed to be included within a subdivision. Sketch Plan is required to allow early, informal evaluation of a proposed subdivision before detailed planning and engineering work has been undertaken and before substantial expenses have been incurred by the applicant.

CODE: Municipal Code, Title 10

PURPOSE: Board of Trustee review of a proposed Sketch Plan.

DEPARTMENT: Community Development

PRESENTER: Todd Bjerkaas, Senior Planner

FISCAL	Cost as Recommended:	n/a
INFORMATION:	Balance Available:	n/a
	Budget Line Item Number:	000 . 00 . 000 . 000000 . 000000
	New Appropriation Required:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

STAFF
RECOMMENDATION: n/a

PLANNING
COMMISSION
RECOMMENDATION: n/a

SUMMARY AND BACKGROUND OF SUBJECT MATTER:

Applicant:
Highway 7 and Bonanza, LLC
Jeff Handlin
9033 E. Easter Place, Suite 110
Centennial, CO 80112

Owner:
Karen K. Kramer and Pratt Properties, LP
Karen K. Kramer and Susan Pratt
105 S. Sunset, Suite H
Longmont, CO 80501

BC Land, LLC
Blake Carlson
10261 Arapahoe Road
Lafayette, CO 80026

Property Location:
 Northeast corner of State Highway 7 and Bonanza Drive.



Existing Conditions:

- Zoning: LR (Low Density Residential) and CC (Community Commercial)
- Site Condition: Vacant land

Adjacent Land-Use/Zoning:

	ZONING	LAND USE
NORTH	RR – Rural Residential	Erie Air Park Subdivision
SOUTH	PUD (Broomfield) – Residential	Anthem Subdivision
EAST	PD – Commerical	Kum & Go Gas Station
WEST	AP – Airport	Erie Airport

Sierra Vista Sketch Plan Summary Information:

- Area: **60.48 Acres (Total)**
 31.35 Acres (Single Family Residential)
 5.56 Acres (Commercial)
 12.1 Acres (Open Space/Landscape Buffer)
 0.94 Acres (1 Pocket Park)
- Dwelling Units Proposed: 199 single-family dwelling units (5,640 sf or larger)
- Gross Density: 3.29 units/acre

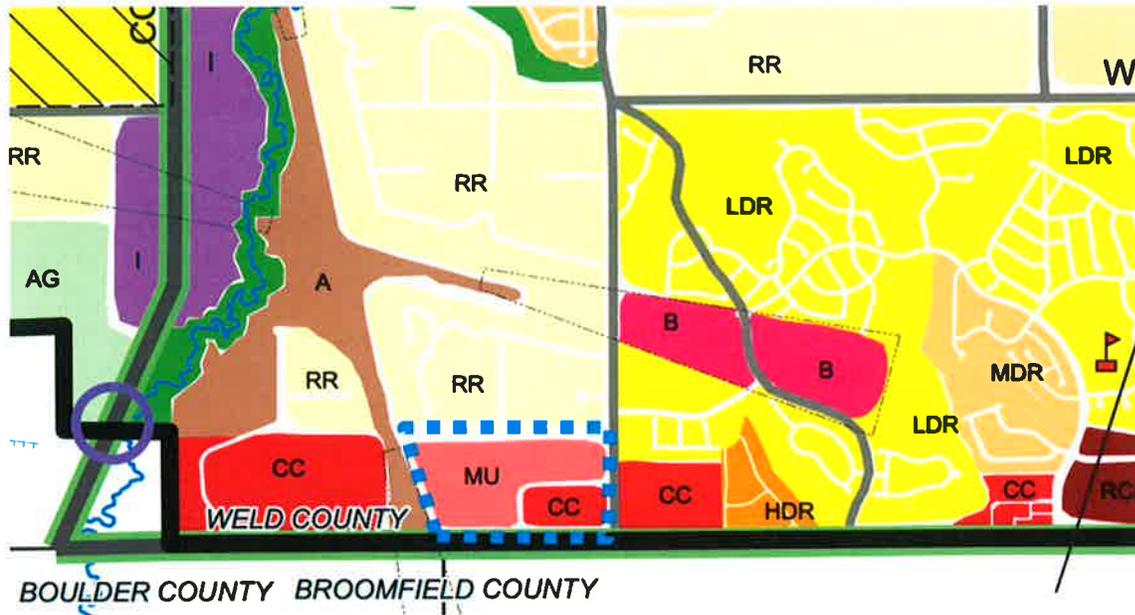
The proposed development proposes two curb cuts from Bonanza Drive one of which would be aligned with the private commercial street just north of Kum & Go in the Vista Ridge subdivision to the east.

There is an existing drainage way at the southwest corner of the site that the applicant can utilize for storm drainage from the site.



Compliance with Town of Erie Comprehensive Plan:

The application is in general Compliance with the Land Use designations on the Comprehensive Plan, Land Use Plan Map. This property allows for commercial and residential land uses.



Compliance with Municipal Code Title 10 (UDC)

Town staff has reviewed the proposed Sketch Plan for compliance with the UDC and has provided the applicant with comments. The applicant has modified the plan accordingly. The Town’s comment and the applicant responses are attached hereto.

Natural Areas Inventory and Endangered Species:

The Town of Erie Natural Areas Inventory identifies a natural area within the proposed project area. The applicant is showing the natural area within a landscape buffer tract and detention areas. The Open Space and Trails Advisory Board has provided the applicant with comments. OSTAB’s comment and the applicant responses are attached hereto.

SKETCH PLAN PROCESS

Below is the process outlined in Title 10 (UDC) of the Municipal Code for Sketch Plan review.

2. Step 2A (Development Application Submittal – Sketch Plan)

Two types of application submittals are required – first, a Sketch Plan, followed by a Preliminary Plat. The Sketch Plan requirements are listed in this Subsection. The Preliminary Plat requirements are listed below as “Step 2B.” Applications for Subdivision shall only be accepted for property annexed into the municipality. A Subdivision application cannot be reviewed concurrently with an annexation application.

a. Purpose

A Sketch Plan represents a generalized land use plan and layout for the area proposed to be included within a subdivision. Sketch Plan is required to allow early, informal evaluation of a proposed subdivision before detailed planning and engineering work has been undertaken and before substantial expenses have been incurred by the applicant.

b. Sketch Plan Submittal Requirements

A Sketch Plan shall be prepared and submitted to the Community Development Director pursuant to the User’s Guide. An Alta Survey shall be prepared and submitted to illustrate the existing conditions on the property and, at a minimum, the Sketch Plan shall contain the following:

- i. Uses proposed;
- ii. Intensity or density of uses proposed;
- iii. Location of public and private open space;
- iv. Drainage Facilities;
- v. Road, street, and pedestrian networks proposed; and
- vi. Existing or proposed utilities and public services for the development.

c. Staff Review

The Community Development Department shall review the Sketch Plan, focusing on standards and criteria of this UDC that are applicable to the proposed development. The Community Development Department shall summarize the results of the review in writing and provide a copy to the applicant. The summary shall include any special information regarding the proposed project, plus an evaluation of the proposal with respect to the current policies of the Town, identifying areas of potential compatibility or conflict with these policies. All comments made by the Community Development Department shall not be binding on the Town’s consideration of any subsequent application, and are intended only to provide an informal evaluation of the proposed project.

d. Meeting to Discuss Sketch Plan

At the request of the Community Development Director or applicant, the parties shall meet to discuss the results of the review. The applicant shall be informed of the necessary provisions of this UDC relating to subdivision application, including submittal requirements, required public improvements, design standards, and Development Agreements. The Community Development Director shall inform the applicant whether or not a Planning Commission Review shall be required.

e. Planning Commission Review

In addition to the staff review the Community Development Director may require that the Sketch Plan be reviewed by the Planning Commission or the applicant may request this review. The staff review summary shall be submitted to the Planning Commission for consideration. All comments made by the Planning Commission shall not be binding on the

Town's consideration of any subsequent application, and are intended only to provide an informal evaluation of the proposed project.

f. *Effect of Review*

The Sketch Plan is not part of a formal application for approval of a subdivision and any comments made by the Town in reaction to a Sketch Plan shall not be binding on the Town's consideration of any subsequent Preliminary or Final Plat application, nor result in a vested property right under this UDC or State Statute. Since the Sketch Plan is conceptual only, there are no lapse provisions applicable.

Staff Review:

Town Attorney
 Town Clerk
 Community Development Director
 Finance Director
 Police Chief
 Public Works Director

Approved by:



A.J. Krieger
Town Administrator

ATTACHMENTS:

- A. Sierra Vista Narrative and Sketch Plan
- B. Draft Planning Commission Minutes
- C. Town comments and applicants response letter

ATTACHMENT A



TOWN OF ERIE

Community Development Department – Planning Division
645 Holbrook Street – PO Box 750 – Erie, CO 80516
Tel: 303.926.2770 – Fax: 303.926.2706 – Web: www.erieco.gov

LAND USE APPLICATION

Please fill in this form completely. Incomplete applications will not be processed.

STAFF USE ONLY			
FILE NAME:	SK-14-00035	Sierra Vista	
FILE NO:	SK-14-00035	DATE SUBMITTED:	9/4/14
		FEES PAID:	3020

PROJECT/BUSINESS NAME: Sierra Vista
PROJECT ADDRESS: Northwest corner of State Highway 7 and Bonanza Drive
PROJECT DESCRIPTION: Commercial and single family residential development

LEGAL DESCRIPTION (attach legal description if Metes & Bounds)

Subdivision Name: Sierra Vista

Filing #:	Lot #:	Block #:	Section: 31	Township: 1 North	Range: 68 West
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OWNER (attach separate sheets if multiple)

Name/Company: Highway 7 and Bonanza, LLC
Contact Person: Jeff Handlin
Address: 9033 East Easter Place, Suite 110
City/State/Zip: Centennial, CO 80112
Phone: 303.604.5448 Fax:
E-mail: jeff.handlin@oreadcapital.com

AUTHORIZED REPRESENTATIVE

Company/Firm: Calibre Engineering, Inc.
Contact Person: Todd A. Johnson
Address: 9090 South Ridgeline Blvd., Suite 105
City/State/Zip: Highlands Ranch, CO 80129
Phone: 303.339.5409 Fax: 303.730.1139
E-mail: taj@calibre.us.com

MINERAL RIGHTS OWNER (attach separate sheets if multiple)

Name/Company:
Address:
City/State/Zip:

MINERAL LEASE HOLDER (attach separate sheets if multiple)

Name/Company:
Address:
City/State/Zip:

LAND-USE & SUMMARY INFORMATION

Present Zoning: HR & CC
Proposed Zoning: LR & CC
Gross Acreage: 60.476

Gross Site Density (du/ac): TBD
Lots/Units Proposed: Maximum 5 DU/Acre
Gross Floor Area:

SERVICE PROVIDERS

Electric: Xcel Energy
Metro District: TBD
Water (if other than Town): Town of Erie

Gas: Xcel Energy
Fire District: Mountain View Fire Protection District
Sewer (if other than Town): Town of Erie

PAGE TWO MUST BE SIGNED AND NOTARIZED

ANNEXATION		SUBDIVISION	
<input type="checkbox"/> Major (10+ acres)	\$ 4000.00	<input checked="" type="checkbox"/> Sketch Plan 202 Lots	\$ 1000.00 + 10.00 per lot
<input type="checkbox"/> Minor (less than 10 acres)	\$ 2000.00	<input type="checkbox"/> Preliminary Plat	\$ 2000.00 + 40.00 per lot
<input type="checkbox"/> Deannexation	\$ 1000.00	<input type="checkbox"/> Final Plat	\$ 2000.00 + 20.00 per lot
COMPREHENSIVE PLAN AMENDMENT		<input type="checkbox"/> Minor Subdivision Plat	\$ 2000.00
<input type="checkbox"/> Major	\$ 3000.00	<input type="checkbox"/> Minor Amendment Plat	\$ 1000.00 + 10.00 per lot
<input type="checkbox"/> Minor	\$ 1200.00	<input type="checkbox"/> Road Vacation (constructed)	\$ 1000.00
ZONING/REZONING		<input type="checkbox"/> Road Vacation (paper)	\$ 100.00
<input type="checkbox"/> Rezoning	\$ 1700.00 + 10.00 per acre	SITE PLAN	
<input type="checkbox"/> PUD Rezoning	\$ 1700.00 + 10.00 per acre	<input type="checkbox"/> Residential	\$ 1400.00 + 10.00 per unit
<input type="checkbox"/> PUD Amendment	\$ 1700.00 + 10.00 per acre	<input type="checkbox"/> Non-Resi. (>10,000 sq. ft.)	\$ 2200.00
<input type="checkbox"/> Major PD Amendment	\$ 3700.00 + 10.00 per acre	<input type="checkbox"/> Non-Resi. (>2,000 sq. ft.)	\$ 1000.00
<input type="checkbox"/> Minor PD Amendment	\$ 500.00	<input type="checkbox"/> Non-Resi. (<2,000 sq. ft.)	\$ 200.00
SPECIAL REVIEW USE		<input type="checkbox"/> Amendment (major)	\$ 1100.00
<input type="checkbox"/> Major	\$ 1000.00	<input type="checkbox"/> Amendment (minor)	\$ 350.00
<input type="checkbox"/> Minor	\$ 400.00	VARIANCE	
<input type="checkbox"/> Oil & Gas	\$ 1200.00	SERVICE PLAN	
			\$ 10,000.00

\$3020.

All fees include both Town of Erie Planning & Engineering review. These fees do not include referral agency review fees, outside consultant review fees, or review fees incurred by consultants acting on behalf of staff. See Town of Erie Municipal Code, Title 2-10-5 for all COMMUNITY DEVELOPMENT FEES.

The undersigned is fully aware of the request/proposal being made and the actions being initiated on the referenced property. The undersigned understand that the application must be found to be complete by the Town of Erie before the request can officially be accepted and the development review process initiated. The undersigned is aware that the applicant is fully responsible for all reasonable costs associated with the review of the application/request being made to the Town of Erie. Pursuant to Chapter 7 (Section 7.2.B.5) of the Unified Development Code (UDC) of the Town of Erie, applicants shall pay all costs billed by the Town for legal, engineering and planning costs incurred by staff, including consultants acting on behalf of staff, necessary for project review. By this acknowledgement, the undersigned hereby certify that the above information is true and correct.

Owner: _____ Date: _____

Owner: _____ Date: _____

Applicant: _____ Date: 8-26-14

STATE OF COLORADO)
) ss.
 County of Adams)

AMBER BETTENHAUSEN
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20124079126
MY COMMISSION EXPIRES 12/11/2016

The foregoing instrument was acknowledged before me this 26th day of August, 2014 by Jeff Handlin.

My commission expires: 12/11/2016.
 Witness my hand and official seal.


 Notary Public

BC Land, LLC
10261 Arapahoe Road
Lafayette, CO 80026

Martin Ostholthoff
Town of Erie
Director of Community Development
645 Holbrook Street
Erie, CO 80516

Highway 7 & Bonanza, LLC
9033 E. Easter Place
Suite 110
Centennial, CO 80112
Attn: Jeff Handlin

May 29, 2014

RE: Letter of Authorization

Gentlemen:

BC Land, LLC ("Seller") is the owner of a portion of Sierra Vista, more particularly described in Exhibit A attached hereto (the "Property").

Seller is currently under contract to sell the Property to Highway 7 & Bonanza, LLC ("H7B"). By way of this correspondence, Seller hereby fully authorizes H7B to act on Seller's behalf to submit applications to the Town of Erie ("Town") to obtain entitlement approvals pertaining to the Property, including, but not limited to, amendments of the comprehensive plan, site development plans, approval of a final plat map, annexation agreements (or amendments thereto), development agreements, approvals of any zoning designations, and any and all entitlements and approvals required by the Town for design and construction of development infrastructure, residential building lots, and commercial parcels.

Very truly yours,



Blake Carlson for BC Land, LLC

STATE OF COLORADO

)

) ss:

CITY AND COUNTY OF DENVER

)

The foregoing instrument was acknowledged before me this 16th day of June, 2014, by Blake Carlson, as Manager of BC Land, LLC, a Colorado limited liability company.

Witness my hand and official seal.

My commission expires: 12/20/2015

Stephanie M. Reed

Notary Public



My Commission Expires 12/20/2015

EXHIBIT A

THE PROPERTY

A part of the South half of the Southeast Quarter of Section 31, Township 1 North, Range 68 West of the Sixth Principal Meridian, County of Weld, State of Colorado, more particularly described as follows:

Commencing at the Southeast corner of said Southeast Quarter of Section 31, and considering the West line of the South half of said Southeast Quarter of Section 31 to bear North 00°45'47" East, with all bearings hereon relative thereto;

Thence North 83°36'10" East a distance of 628.67 feet to a point on the Northerly Right-of-Way of State Highway No. 7 as described in the office of the Weld County Clerk and Recorder in Book 1224 at Reception No. 02170911 and the Point of Beginning;

Thence North 16°31'20" West a distance of 540.23 feet; Thence South 89°34'53" East a distance of 837.42 feet;

Thence South 00°25'07" West a distance of 516.80 feet to a point on said Northerly Right-of-Way;

Thence North 89°34'53" West along said Northerly Right-of-Way a distance of 666.57 feet;

Thence North 89°32'45" West a distance of 13.43 feet to the Point of Beginning;

Said parcel contains an area of 392,100 square feet, or 9.001 acres, more or less.

Karen K. Kramer & Pratt Properties, LP
105 S. Sunset, Suite H
Longmont, CO 80501

Martin Ostholthoff
Town of Erie
Director of Community Development
645 Holbrook Street
Erie, CO 80516

Highway 7 & Bonanza, LLC
9033 E. Easter Place
Suite 110
Centennial, CO 80112
Attn: Jeff Handlin

May 29, 2014

RE: Letter of Authorization

Gentlemen:

Karen K. Kramer and Pratt Properties, LP (collectively, "Seller") are the owner of a portion of Sierra Vista, more particularly described in Exhibit A attached hereto (the "Property").

Seller is currently under contract to sell the Property to Highway 7 & Bonanza, LLC ("H7B"). By way of this correspondence, Seller hereby fully authorizes H7B to act on Seller's behalf to submit applications to the Town of Erie ("Town") to obtain entitlement approvals pertaining to the Property, including, but not limited to, amendments of the comprehensive plan, site development plans, approval of a final plat map, annexation agreements (or amendments thereto), development agreements, approvals of any zoning designations, and any and all entitlements and approvals required by the Town for design and construction of development infrastructure, residential building lots, and commercial parcels.

Very truly yours,



Karen K. Kramer



Susan Pratt, for Pratt Properties, LP

EXHIBIT A

THE PROPERTY

A part of the South Half of the Southeast Quarter of Section 31, Township 1 North, Range 68 West of the Sixth Principal Meridian, County of Weld, State of Colorado, more particularly described as follows:

Commencing at the Southeast Corner of said Southeast Quarter of Section 31;

Thence North 00°15'14" East along the East line of said Southeast Quarter, a distance of 75.31 feet;

Thence North 89°44'46" West, a distance of 109.21 feet to the Westerly Right-of-Way of County Road No. 3 as recorded in the office of the Weld County Clerk and Recorder in Book 1631 at Reception No. 2572958, said point also being on the Northerly Right-of-Way of State Highway No. 7 as described in the office of the Weld County Clerk and Recorder in Book 1224 at Reception No. 02170911 and the Point of Beginning:

Thence along said Northerly Right-of-Way of State Highway No. 7, along a line seventy-five (75.00) feet Northerly distant and parallel, when measured at right angles, with the South line of said Southeast Quarter the following two (2) courses;

1. Thence North 89°34'53" West, a distance of 1896.40 feet;
2. Thence North 89°32'45" West, a distance of 13.43 feet to the Easterly line of that parcel of land as recorded in the office of the Weld County Clerk and Recorder in Book 1274 at Reception No. 02225423;

Thence along said Easterly line the following two (2) courses:

1. Thence North 16°31'20" West, a distance of 1176.48 feet;
2. Thence North 12°14'16" West, a distance of 123.38 feet to the North line of said South half of the Southeast Quarter of Section 31;

Thence South 89°35'08" East along said North line, a distance of 2330.26 feet to said Westerly Right-of-Way of County Road No. 3 as described in Book 1631 at Reception No. 2572958;

Thence along said Westerly Right-of-Way the following two (2) courses:

1. Thence South 04°46'24" West, a distance of 564.23 feet;
2. Thence South 01°04'07" West, a distance of 683.43 feet to the Point of Beginning,

County of Weld, State of Colorado,

Except:

A part of the South half of the Southeast Quarter of Section 31, Township 1 North, Range 68 West of the Sixth Principal Meridian, County of Weld, State of Colorado, more particularly described as follows:

Commencing at the Southeast corner of said Southeast Quarter of Section 31, and considering the West line of the South half of said Southeast Quarter of Section 31 to bear North 00°45'47" East, with all bearings hereon relative thereto;

Thence North 83°36'10" East a distance of 628.67 feet to a point on the Northerly Right-of-Way of State Highway No. 7 as described in the office of the Weld County Clerk and Recorder in Book 1224 at Reception No. 02170911 and the Point of Beginning;

Thence North 16°31'20" West a distance of 540.23 feet; Thence South 89°34'53" East a distance of 837.42 feet;

Thence South 00°25'07" West a distance of 516.80 feet to a point on said Northerly Right-of-Way;

Thence North 89°34'53" West along said Northerly Right-of-Way a distance of 666.57 feet;

Thence North 89°32'45" West a distance of 13.43 feet to the Point of Beginning;

Said parcel contains an area of 392,100 square feet, or 9.001 acres, more or less.

September 9, 2014

Todd Bjerkaas
Community Development Department
645 Holbrook Street
Erie, CO 80516

Re: Sierra Vista – Sketch Plan – Written Narrative

Dear Todd,

A. Project Concept and Purpose of Request

The site is bounded on the east by Bonanza Drive, on the north by Rural Residential (RR), on the west by Airport (AP), and on the south by State Highway 7 and the Anthem residential development.

The land is currently vacant with native grasses and insignificant tree species. The Applicant respectively seeks a staff report in support of the sketch plan application with a decision by the Town Board by fall 2014.

The sketch plan application subdivides the parcel into single family lots and a commercial lot.

B. Land Area

The total land area to be subdivided is 60.48 acres. The residential portion is 31.45 acres. The open space area is 18.50 acres. The proposed right-of-way is 10.52 acres. The commercial area is 5.56 acres. The site will have one pocket park roughly 0.92 acres.

C. Lot Summary

The current plan has 202 lots. The residential density is 3.34 lots/acre.

D. Commercial Area

The commercial area is 5.56 acres. The floor area will be determined at the time of the final site plan.

E. Open Space

Public and private open space will be provided per the Towns criteria and is 18.50 acres.

F. Phasing

Site specific phasing will be determined during the platting process.

G. Existing Infrastructure

The site will have water supplied from an existing 12-inch waterline within Bonanza Drive and an existing 12-inch from the residential property to the north. The existing 14-inch asbestos concrete pipe along the north property line will be replaced with a new line per the Town's

master plan and the site's requirements. Appropriate water looping will be provided through the site.

The sanitary sewer from this filing will connect into an 8-inch line proposed in the South Coal Creek Sanitary Sewer capital improvement project, currently designed by the Town. At this time there are no other considerations for sanitary sewer. The proposed extension has been designed to accept flows from this development. There will not be any improvements made to the existing sanitary sewer infrastructure. The Owner will contribute per the annexation agreement or as defined within the project development agreement. Dry utility companies such as Comcast, Century Link and Public Service Company have agreed to provide service to this development. The major transmission lines along Highway 7 will remain.

The site is within the boundaries of Weld County School District. Fire protection will be provided by Mountain View Fire Rescue. Dry utility services will be provided by Xcel Energy, Comcast and CenturyLink.

The access points for the residential and commercial portions of the development will be from Bonanza Drive. The commercial development may also have an access point from State Highway 7. We will work with the Town of Erie and Colorado Department of Transportation (CDOT) when locating the access points.

H. Ownership/Maintenance of Open Space

The open space tracts within the development will be owned and maintained by a separate association. Amenities in the private park will be owned and maintained by a separate association. There are no public parks projected within this project.

I. Covenants

This development will adopt the covenants as described in the Development Agreement.

Enclosed with this letter are copies of the Sketch Plan and development reports as required.

Please accept this request on behalf of Highway 7 and Bonanza, LLC and we look forward to working with the Town of Erie's staff on this project.

Sincerely,

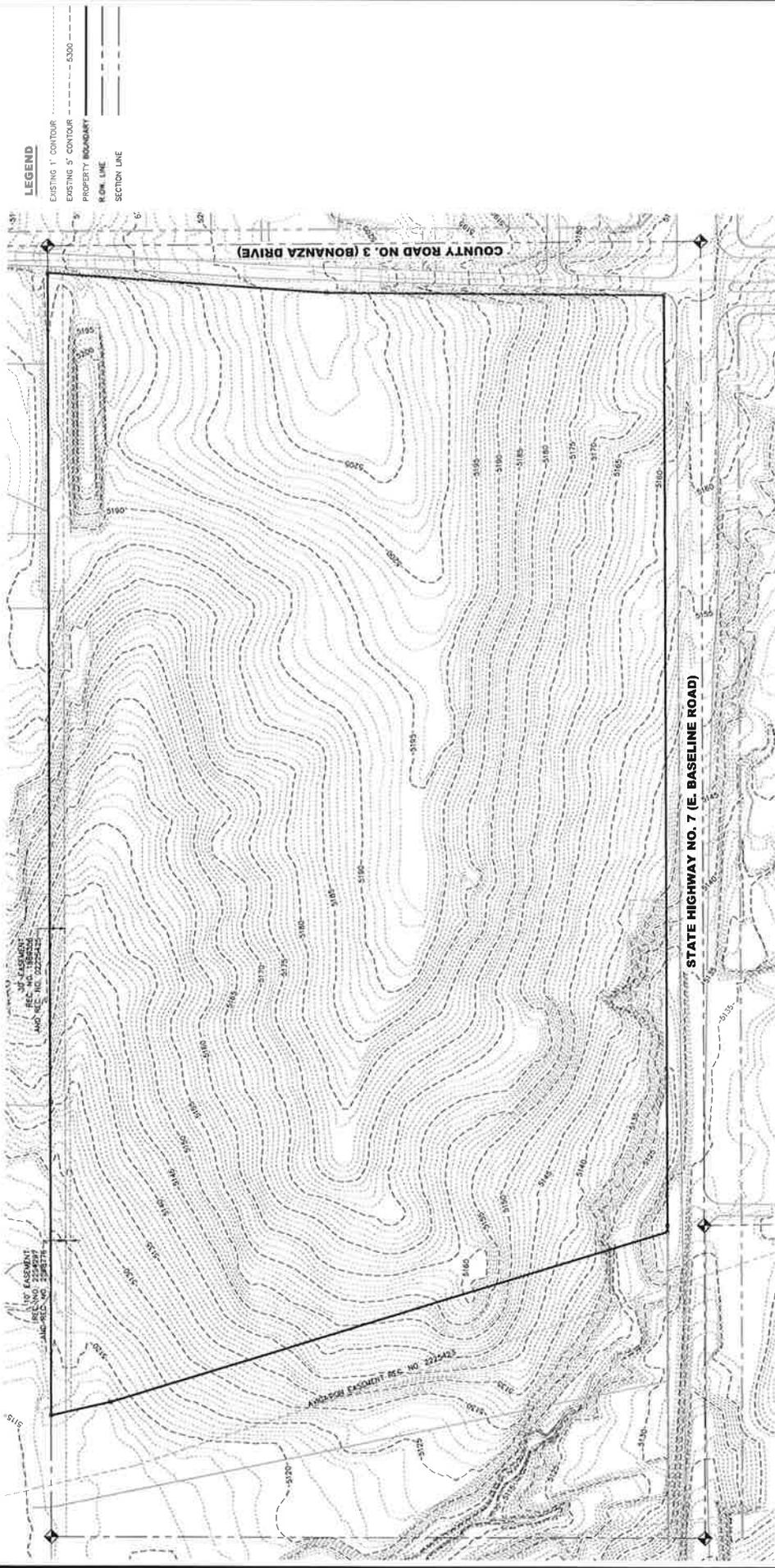
CALIBRE ENGINEERING, INC.



Todd A. Johnson, P.E.
Vice President
Director of Professional Services

SIERRA VISTA SKETCH PLAN

A PORTION OF THE SOUTH 1/2 OF THE SOUTHEAST 1/4 OF SECTION 31, TOWNSHIP 1 NORTH, RANGE 68 WEST,
SIXTH PRINCIPAL MERIDIAN, TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
60.476 ACRES - 199 LOTS - 6 TRACTS
SK-14-00035



DATE	REVISION	 NORTH	 1" = 50' ± Horizontal	<table border="1"> <tr> <th>DATE</th> <th>BY</th> <th>REVISION</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	DATE	BY	REVISION				SHEET NO. EX1 TOTAL SHEETS 3 DATE: NOVEMBER 11, 2014
					DATE	BY	REVISION				
PROJECT NO. 13-EX1.dwg PROJECT NAME: SIERRA VISTA CLIENT: BONANZA & HIGHWAY 7, LLC	CALIBRE Calibre Engineering, Inc. 1400 S. W. 10th St., Suite 100 Fort Lauderdale, FL 33315 www.calibre-engineering.com (954) 571-1000										

ATTACHMENT B

DRAFT MINUTES
Town of Erie
Planning Commission Regular Meeting
Wednesday, November 19, 2014
6:30 p.m.
Board Room, Erie Town Hall, 645 Holbrook, Erie, Co 80516

I. CALL MEETING TO ORDER & PLEDGE OF ALLEGIANCE

Chairman Bottenhorn called the Regular Meeting of the Erie Planning Commission to order at 6:30 p.m.

II. ROLL CALL

Commissioner Bottenhorn - Present

Commissioner Burgard - Present

Commissioner Campbell - Present

Commissioner Kemp - Present

Commissioner Fraser - Present

Commissioner Gippe - Present

Commissioner Harrison - Present

Staff Present: R. Martin Ostholthoff, Community Development Director; and
Hallie Sawyer, Secretary to the Commission

III. APPROVAL OF THE AGENDA

Commissioner Campbell moved to approve the November 19, 2014, Regular Meeting Agenda as submitted. The motion, seconded by Commissioner Gippe, carried with all voting in favor thereof.

IV. APPROVAL OF MINUTES

a. Minutes from the September 17, 2014, Regular Meeting.

Commissioner Campbell moved to approve the September 19, 2014, Minutes as submitted. The motion, seconded by Commissioner Kemp, carried with all voting in favor thereof.

V. PUBLIC COMMENTS (This agenda item provides the public an opportunity to discuss items other than items that are on the agenda. The Planning Commission is not prepared to decide on matters brought up at this time, but if warranted, will place them on a future agenda.)

None.

VI. GENERAL BUSINESS (This agenda item is reserved for matters that are ready for Commission action, and do not fit into other categories, i.e. resolutions)

1. Sierra Vista Sketch Plan

Purpose: Informal presentation and evaluation of the proposed subdivision.

Project File #: SK-14-00035

Request: Comment on the proposed Sketch Plan

Location: NW Corner of Colorado Highway 7 and Bonanza Drive

Zoning: CC – Community Commercial & HR – High Density Residential

Applicants: Highway 7 Equities, LLC

(Staff Planner: Todd Bjerkaas)

Mr. Ostholthoff presented the application for Mr. Bjerkaas who was unable to attend. Mr. Ostholthoff outlined the procedure for this General Business Item and turned the floor over to the applicant. Carl Nelson, Highway 7 Investors and Todd Johnson, Calibre Engineering presented an outline of their proposed development, noting physical constraints (adjacent to airport approach zone and State Highway 7 in addition to topographical challenges), noting how the proposed plan addresses these challenges.

Commissioner comments and questions covered parks; trails; open space; traffic; retaining walls; oil and gas sites; and connectivity.

VII. STAFF REPORTS (This agenda item is reserved for specific items from Staff requiring Commission direction or just relaying important information.)

Mrs. Sawyer reminded everyone to make their reservations for the Christmas Party.

VIII. COMMISSIONER REPORTS AND DISCUSSION ITEMS (This agenda item is for all Planning Commission reports and items of information as well as Commission discussion items, not listed on the agenda)

None.

IX. ADJOURNMENT

There being no further business to come before the Commission, Chairman Bottenhorn adjourned the November 19, 2014, Regular Meeting of the Planning Commission at 7:46 p.m.

Respectfully Submitted,

Town of Erie Planning Commission

By: _____
Hallie S. Sawyer, Secretary

By: _____
J. Eric Bottenhorn, Chair

ATTACHMENT C



SIERRA VISTA
PHASE I DRAINAGE REPORT

SEPTEMBER 2014

For:
Highway 7 and Bonanza, LLC
9033 East Easter Place, Suite 110
Englewood, CO 80112

SIERRA VISTA

PHASE I DRAINAGE REPORT

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 B. Description of Property 1

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- A. Maps and Exhibits
- B. Copies of Graphs, Tables and References

SIERRA VISTA
PHASE I DRAINAGE REPORT
Page 1 of 4

SCOPE

The purpose of this report is to review at a conceptual level the feasibility and design characteristics of the proposed development and drainage system.

I. INTRODUCTION

A. Location

1. The Sierra Vista site is north of State Highway No. 7 (E. Baseline Road) and west of County Road No. 3 (Bonanza Drive).
2. The site is located in the Southeast quarter of Section 31, Township 1 North, Range 68 West of the 6th Principal Meridian, Town of Erie, County of Weld, State of Colorado.
3. The Tri-County Airport Drainage Ditch runs west of the site into an existing storm drainage conveyance that eventually enters into Coal Creek. Coal Creek is approximately 3,500 feet west of the site.
4. The site is bound on the west and northwest by the Erie Municipal Airport, the south by State Highway No. 7, the east by County Road No. 3, and the north by rural residential homes.

B. Description of Property

1. Sierra Vista is approximately 60.5 acres in size.
2. The site is currently undeveloped land with native grasses. According to the *Natural Resources Conservation Service Web Soil Survey* for Weld County, the site is primarily Hydrologic Soil Group D as Midway-Shingle complex, and some Group C soils as Ulm clay loam.
3. The site is split by a ridge running east to west with slopes ranging from approximately 7-12%.
4. The development will consist of single family and commercial uses.
5. There are no known delineated wetlands onsite.

II. DRAINAGE BASINS

A. Major Basin Description

1. A FEMA Flood Insurance Rate Map (FIRM) is in Appendix A, shown on Community Panel No 080181 0018E. No mapped 100 year flood plains are shown for the site.
2. The site is within the Coal Creek watershed and drains northwest to Coal Creek via the Tri-County Airport Drainage Ditch.
3. There are currently no detention facilities on the site.
4. There are no lakes or ponds which either influence or may be influenced by the local drainage. There are no dams under the State Engineer's Office jurisdiction on site.

B. Sub-Basin Description

1. Detention facilities will need to be constructed on the site to attenuate outflow from the site during the 100 year flood event.
2. Currently, the entire site drains to the Tri-County Airport Drainage Ditch.

SIERRA VISTA
PHASE I DRAINAGE REPORT
Page 2 of 4

3. The increase in storm runoff due to the proposed development will be detained in detention pond(s), and released per Town of Erie criteria. The proposed development will not increase historic runoff and therefore downstream properties should not be adversely affected by the development of the proposed site.

III. DRAINAGE FACILITY DESIGN

A. General Concept

1. The onsite drainage will be, in general, captured by proposed curb and gutter and storm sewer. The minor storm event will be conveyed by inlets and storm pipes. The major storm event will be conveyed by streets and result in a pressurized storm sewer system.
2. The proposed drainage patterns will follow existing drainage patterns as closely as possible. Runoff will generally flow from east to west, by the streets or the proposed storm sewer system.
3. All storm runoff will flow to the onsite detention and water quality facilities.

B. Drainage Design Criteria

1. Criteria used in the development of this Phase I Drainage Report include:
 - The *Town of Erie Standards and Specifications Storm Criteria*.
 - The Urban Drainage and Flood Control District's Urban Storm Drainage Criteria Manual was also used as a reference and guide for criteria.
2. Hydrologic criteria to be used in the development calculations include:
 - The Rational Method will be used for all hydrologic calculations.
 - The minor event is the 2-year storm with a one hour design rainfall depth of 1.01 inches per hour.
 - The major event is the 100-year storm with a one hour design rainfall depth of 2.70 inches per hour.
 - Runoff coefficients, *C*, were derived from Tables RO-3 and RO-5 of the USDCM and based on the density from a conceptual site plan.
3. Hydraulic Criteria to be used in the development calculations include:
 - Per *Town of Erie Standards and Specifications Storm Criteria*, Tables 800-7 and 800-8, allowable flow depths within the streets are:
 - To the top of curb flow may spread to crown of street for the minor event.
 - Residential dwellings should be no less than 12 inches above the 100-year flood at the ground line or lowest water entry of the building. The depth of water over the gutter flow line will not exceed 18 inches for the major storm.
 - Urban Drainage Spreadsheets for inlet and detention pond design will be used to size inlets, calculate street capacity and design the detention facilities.

C. Specific Details

1. The proposed development will be comprised of drainage basins that are divided by the existing ridge that runs east to west across the site.

SIERRA VISTA
PHASE I DRAINAGE REPORT
Page 3 of 4

- Proposed detention basin(s) will be provided on the western portion of the site. The detention pond will provide detention for the site and will outlet directly into the Tri-County Airport Drainage Ditch at historic rates.
 - 2. The proposed site improvements include constructed roadways that will become a part of the Town of Erie network. The storm drainage from this site will be detained in proposed detention pond(s) and be released per Town of Erie criteria
- D. Adaptions of Criteria
1. No deviation from criteria is requested for this drainage design at this time.

IV. SUMMARY

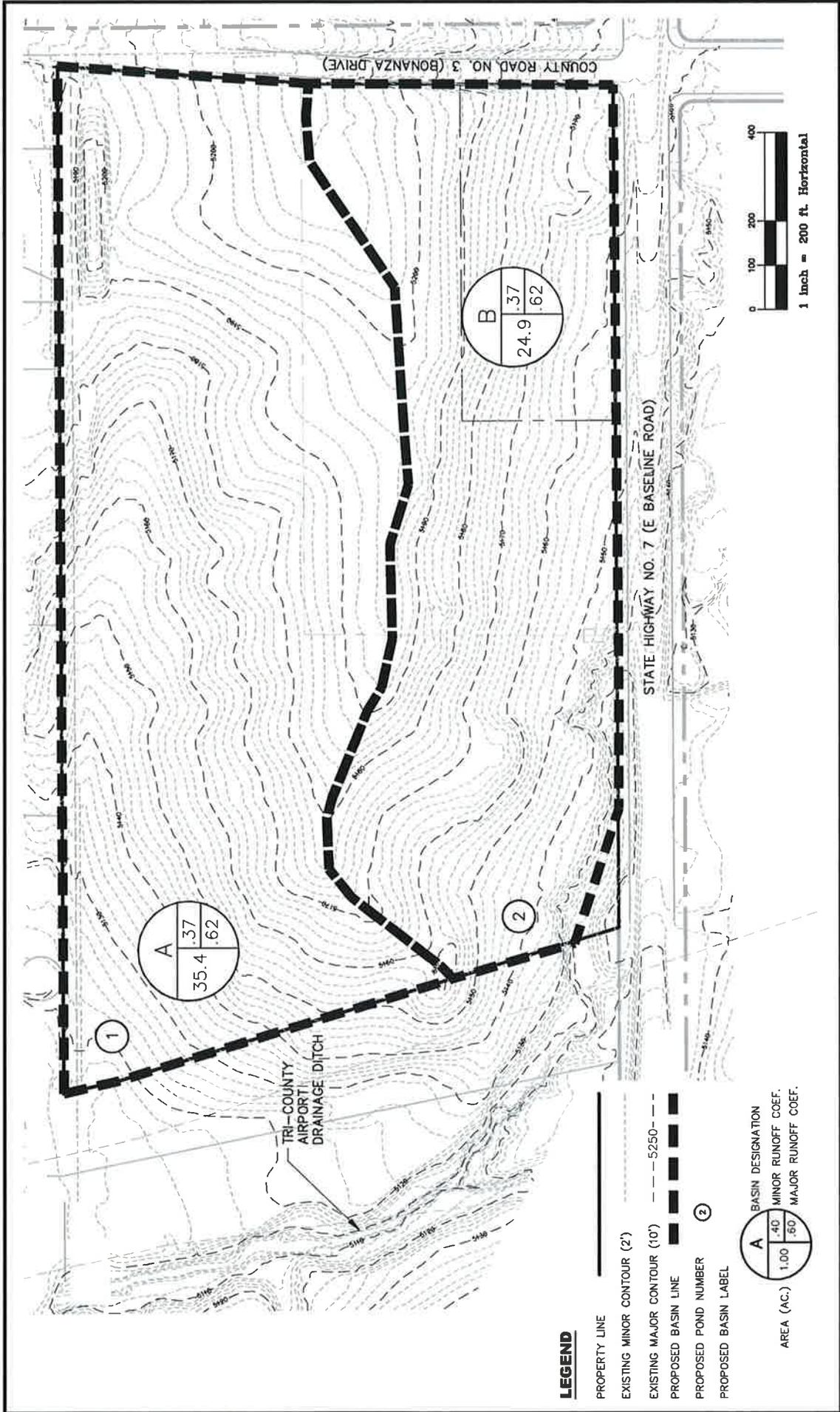
- A. Compliance with Standards
1. This drainage report is in general compliance with the Town of Erie, *Standards and Specifications for Design and Construction of Public Improvements*.
 2. The Urban Drainage and Flood Control District's *Urban Storm Drainage Criteria Manual* was also used as a reference and guide for criteria.
- B. Summary of Concept
1. Onsite flow will be conveyed per Town criteria in storm systems designed for the minor storm event.
 2. Onsite detention facilities will provide adequate on-site drainage, attenuation and control for stormwater.
 3. The proposed development will not increase historic runoff and therefore downstream properties should not be adversely affected by the development of the proposed site.

V. LIST OF REFERENCES

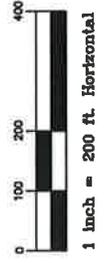
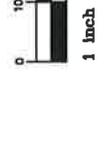
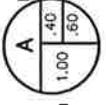
All criteria and technical information used

1. The Town of Erie, *Standards and Specifications for Design and Construction of Public Improvements, Section 800, Storm Drainage Facilities*, 2012 Edition.
2. *Urban Storm Drainage Criteria Manuals*, Urban Drainage Flood Control District, Jan 2007.
3. *Flood Insurance Rate Map*, Map Number 0801810018E, Effective Date December 2, 2004, Federal Emergency Management Agency.
4. Hydrologic Group Rating for Weld County, CO, USDA Natural Resources Conservation Service.

APPENDIX A
MAPS AND EXHIBITS



LEGEND
 PROPERTY LINE
 EXISTING MINOR CONTOUR (2')
 EXISTING MAJOR CONTOUR (10')
 PROPOSED BASIN LINE
 PROPOSED POND NUMBER ①
 PROPOSED BASIN LABEL
 A BASIN DESIGNATION
 AREA (AC.)
 1.00 MINOR RUNOFF COEF.
 .40 MAJOR RUNOFF COEF.



PATH: P:\Oread Sierra Vista\ADDP\Xhibit SX\Drainage Map Ph 1.dwg PLOTTED BY: B. Robins PLOT DATE: Aug 05, 2014 11:11am XREFS: 10 PMA, 10 EPN, 10 ECN, 10 BASE.		Drawing Name: X-Drainage Map Ph 1.dwg		Sheet D1		of 1	
Prepared By: Oread Capital & Development, LLC		Checked By: R/JL		Date AUGUST 6, 2014		Title SIERRA VISTA DRAINAGE BASINS MAP	
Oread Sierra Vista Oread Capital & Development, LLC		Oread R/JL		TAJ TAJ			
Calibre Calibre Engineering, Inc. 2777 Jolly Road, Suite 200 Henderson, Nevada 89015 702.736.1414 Construction Management Civil Engineering Surveying							

DETENTION VOLUME BY THE FULL SPECTRUM METHOD

Project: Sierra Vista
Basin ID: Pond 1

* User input data shown in blue.

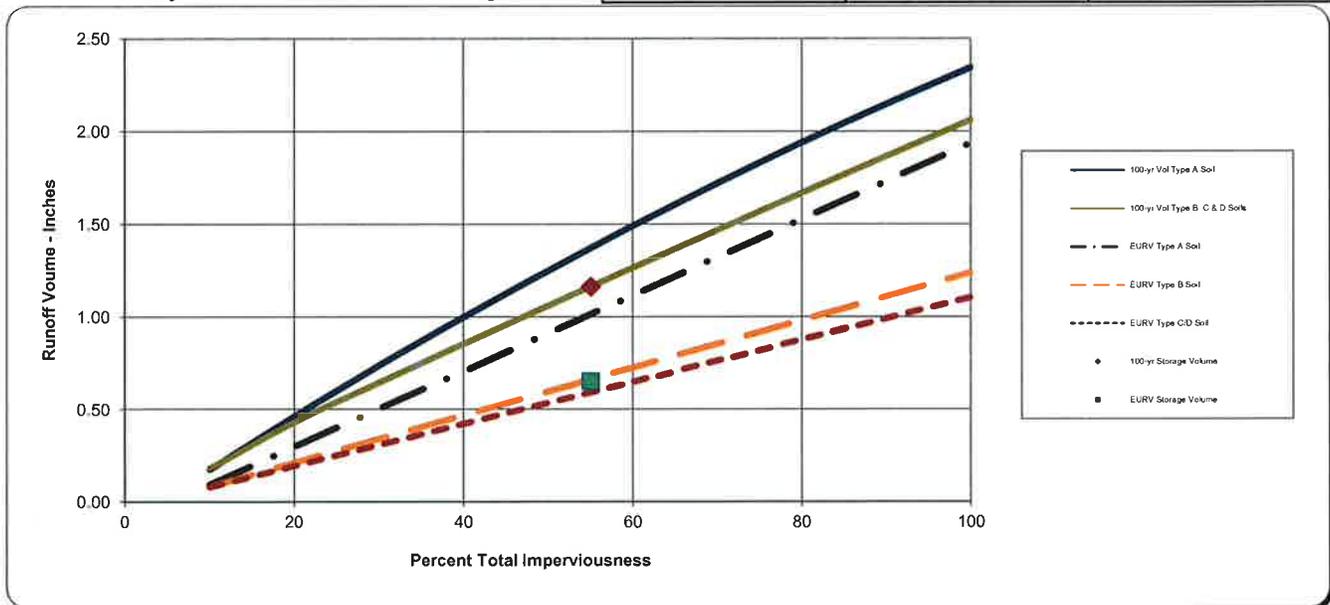
Area of Watershed (acres)	35.40	
Subwatershed Imperviousness	55.0%	
Level of Minimizing Directly Connected Impervious Area (MDCIA)	0	0
Effective Imperviousness ¹	55.0%	
Hydrologic Soil Type	Percentage of Area	Area (acres)
Type A		0.0
Type B		0.0
Type C or D	100.0%	35.4

Recommended Horton's Equation Parameters for CUHP		
Infiltration (inches per hour)		Decay Coefficient--g
Initial--f _i	Final--f _o	
3	0.5	0.0018

Detention Volumes ^{2,5}		
(watershed inches)	(acre-feet)	Maximum Allowable Release Rate, cfs ³
0.65	1.92	Design Outlet to Empty EURV in 72 Hours
1.16	3.43	35.40

Excess Urban Runoff Volume⁴

100-year Detention Volume Including WQCV⁵



Notes:

- 1) Effective imperviousness is based on Figure ND-1 of the Urban Storm Drainage Criteria Manual (USDCM).
- 2) Results shown reflect runoff reduction from Level 1 or 2 MDCIA and are plotted at the watershed's total imperviousness value; the impact of MDCIA is reflected by the results being below the curves.
- 3) Maximum allowable release rates for 100-year event are based on Table SO-1. Outlet for the Excess Urban Runoff Volume (EURV) to be designed to empty out the EURV in 72 hours. Outlet design is similar to one for the WQCV outlet of an extended detention basin (i.e., perforated plate with a micro-pool) and extends to top of EURV water surface elevation.
- 4) EURV approximates the difference between developed and pre-developed runoff volume.
- 5) 100-yr detention volume includes EURV. No need to add more volume for WQCV or EURV

DETENTION VOLUME BY THE FULL SPECTRUM METHOD

Project: Sierra Vista
Basin ID: Pond 2

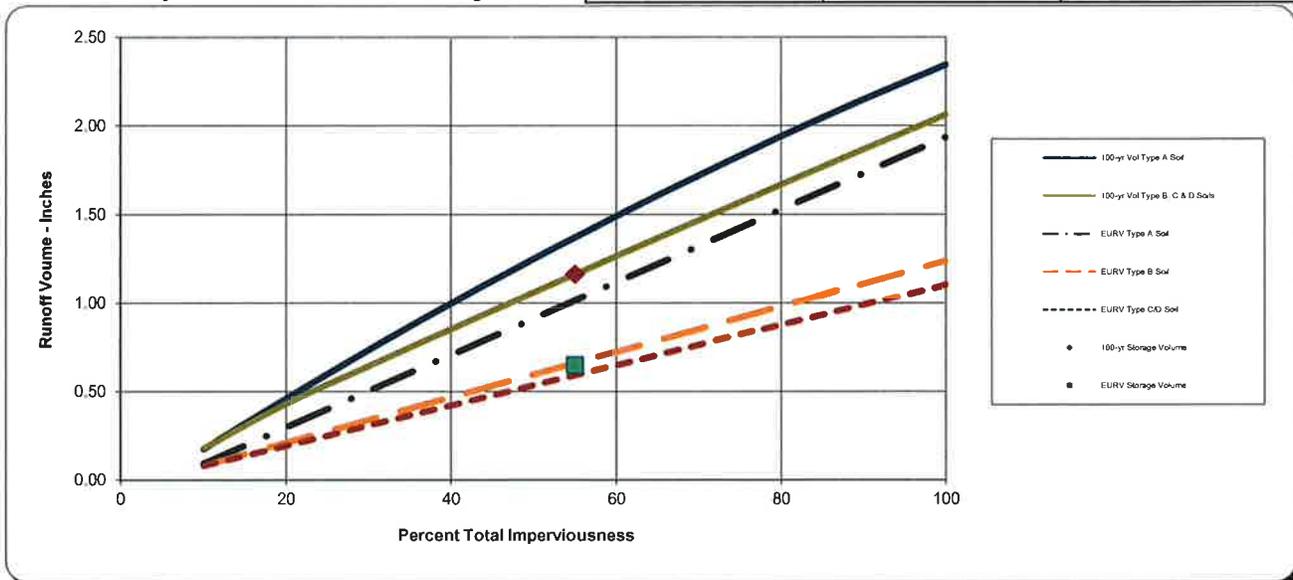
* User input data shown in blue.

Area of Watershed (acres)	24.90	
Subwatershed Imperviousness	55.0%	
Level of Minimizing Directly Connected Impervious Area (MDCIA)	0	0
Effective Imperviousness ¹	55.0%	
Hydrologic Soil Type	Percentage of Area	Area (acres)
Type A		0.0
Type B		0.0
Type C or D	100.0%	24.9

Recommended Horton's Equation Parameters for CUHP		
Infiltration (inches per hour)		Decay Coefficient-- <i>a</i>
Initial-- <i>f_i</i>	Final-- <i>f_o</i>	
3	0.5	0.0018
Detention Volumes ^{2,5}		Maximum Allowable Release Rate, cfs ³
(watershed inches)	(acre-feet)	Design Outlet to Empty EURV in 72 Hours
0.65	1.35	24.90
1.16	2.41	24.90

Excess Urban Runoff Volume⁴

100-year Detention Volume Including WQCV⁵



Notes:

- 1) Effective imperviousness is based on Figure ND-1 of the Urban Storm Drainage Criteria Manual (USDCM).
- 2) Results shown reflect runoff reduction from Level 1 or 2 MDCIA and are plotted at the watershed's total imperviousness value; the impact of MDCIA is reflected by the results being below the curves.
- 3) Maximum allowable release rates for 100-year event are based on Table SO-1. Outlet for the Excess Urban Runoff Volume (EURV) to be designed to empty out the EURV in 72 hours. Outlet design is similar to one for the WQCV outlet of an extended detention basin (i.e., perforated plate with a micro-pool) and extends to top of EURV water surface elevation.
- 4) EURV approximates the difference between developed and pre-developed runoff volume.
- 5) 100-yr detention volume includes EURV. No need to add more volume for WQCV or EURV

APPENDIX B
COPIES OF GRAPHS, TABLES AND REFERENCES



MAP SCALE 1" = 500'



496000 M



PANEL 0018E

FIRM FLOOD INSURANCE RATE MAP
 TOWN OF ERIE, COLORADO
 BOULDER AND WELD COUNTIES
PANEL 18 OF 50

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:
 COMMUNITY NUMBER, PANEL, SUPER NUMBER, TOWN OF ERIE, COLORADO

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown below should be used on insurance applications for the subject community.

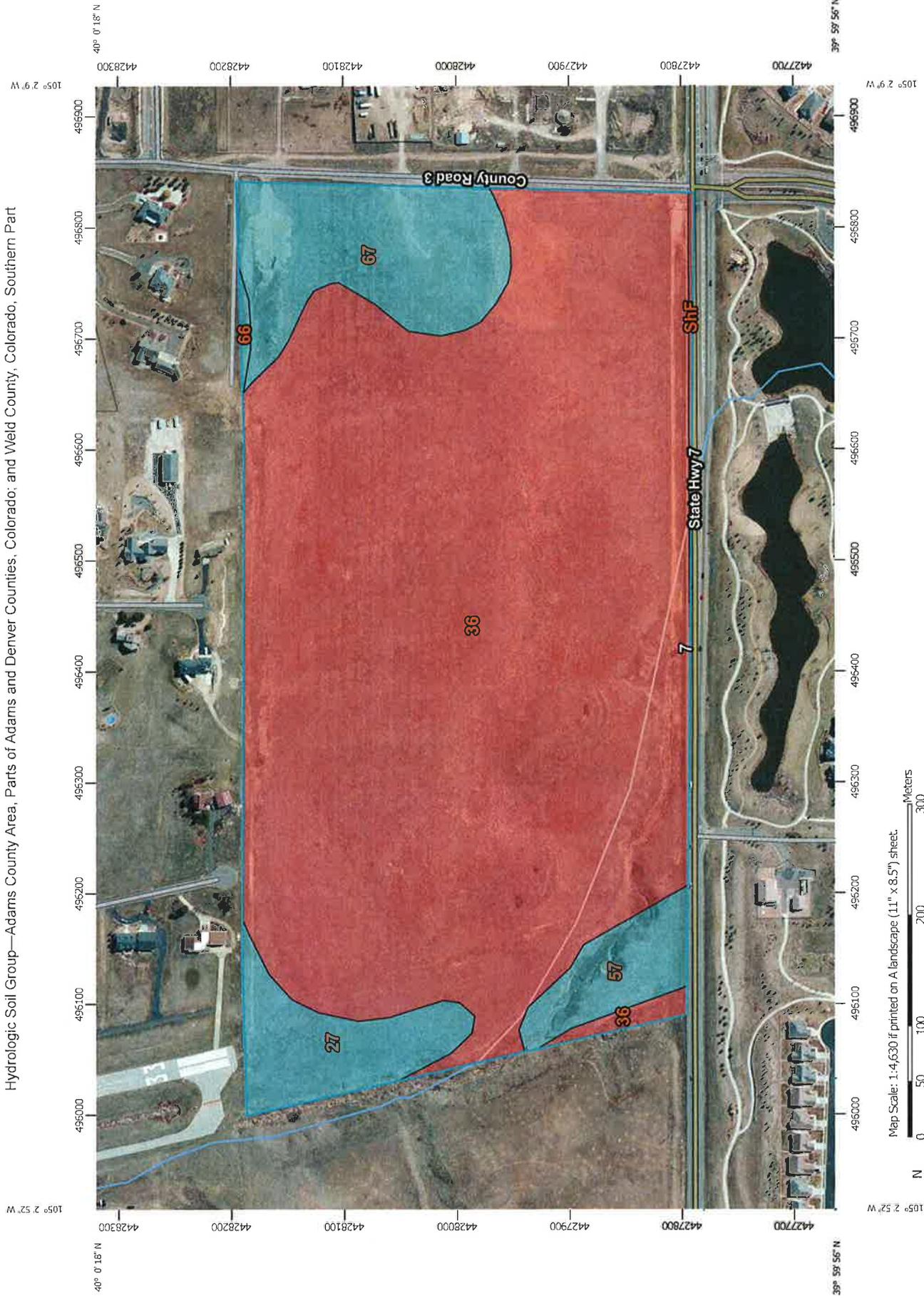


MAP NUMBER 0801810018E
 MAP REVISED: DECEMBER 2, 2004

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

Hydrologic Soil Group—Adams County Area, Parts of Adams and Denver Counties, Colorado; and Weld County, Colorado, Southern Part



Map Scale: 1:4,630 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

MAP LEGEND

 Area of Interest (AOI)	 C
 Area of Interest (AOI)	 C/D
Soils	 D
Soil Rating Polygons	 Not rated or not available
 A	Water Features
 A/D	 Streams and Canals
 B	Transportation
 B/D	 Rails
 C	 Interstate Highways
 C/D	 US Routes
 D	 Major Roads
 Not rated or not available	 Local Roads
Soil Rating Lines	Background
 A	 Aerial Photography
 A/D	
 B	
 B/D	
 C	
 C/D	
 D	
 Not rated or not available	
Soil Rating Points	
 A	
 A/D	
 B	
 B/D	

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at scales ranging from 1:20,000 to 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Adams County Area, Parts of Adams and Denver Counties, Colorado
 Survey Area Data: Version 10, Dec 24, 2013
 Soil Survey Area: Weld County, Colorado, Southern Part
 Survey Area Data: Version 12, Jan 3, 2014

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 22, 2011—Apr 13, 2012

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — Adams County Area, Parts of Adams and Denver Counties, Colorado (CO001)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
ShF	Samsil-Shingle complex, 3 to 35 percent slopes	D	0.3	0.3%
Subtotals for Soil Survey Area			0.3	0.3%
Totals for Area of Interest			78.1	100.0%

Hydrologic Soil Group— Summary by Map Unit — Weld County, Colorado, Southern Part (CO618)				
Map unit symbol	Map unit name	Rating	Acres In AOI	Percent of AOI
27	Heldt silty clay, 1 to 3 percent slopes	C	3.8	4.9%
36	Midway-Shingle complex, 5 to 20 percent slopes	D	64.1	82.2%
57	Renhill clay loam, 3 to 9 percent slopes	C	2.6	3.3%
66	Ulm clay loam, 0 to 3 percent slopes	C	0.2	0.2%
67	Ulm clay loam, 3 to 5 percent slopes	C	7.1	9.1%
Subtotals for Soil Survey Area			77.8	99.7%
Totals for Area of Interest			78.1	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Sierra Vista Rezoning January 2008

Preliminary Geotech Study



Terracon

PRELIMINARY GEOTECHNICAL ENGINEERING REPORT
PROPOSED COMMERCIAL/INDUSTRIAL DEVELOPMENT
NORTHWEST CORNER OF STATE HIGHWAY NO. 7 AND WCR NO. 3
WELD COUNTY, COLORADO

PROJECT NO. 22975061
May 30, 1997

Prepared for:

Pratt Management Company, L.L.C.
1960 Ken Pratt Boulevard
Longmont, Colorado 80501
Attn: Mr. Don Hostetter

Prepared by:

Terracon Consultants Western, Inc.
Longmont, Colorado

Terracon

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Terracon

CONSULTANTS WESTERN, INC.
P.O. Box 1135 • 1242 Bramwood Place
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May 30, 1997

Mr. Don Hostetter
Pratt Management Company LLC
1960 Ken Pratt Blvd.
Longmont, CO 80501

**Re: Preliminary Geotechnical Engineering Report
Proposed Commercial/Industrial Development
Northwest Corner of State Highway No. 7 and WCR No. 3
Weld County, Colorado
Project No. 22975061**

Terracon Consultants Western, Inc. (Terracon) has completed a preliminary geotechnical engineering exploration for the proposed commercial/industrial development to be located on the northwest corner of State Highway No. 7 and Weld County Road No. 3 south of the Town of Erie, Colorado.

The results of our preliminary engineering study, including the boring location diagram, test boring records and laboratory test results for the project are attached. The accompanying geotechnical report presents our findings and preliminary recommendations concerning general earthwork, possible foundation systems, floor slab and pavement design and construction for the proposed development. Further details are provided in this report.

We appreciate the opportunity to be of service to you on this phase of your project. If you have any questions concerning this report, or if we may be of further service to you, please do not hesitate to contact us.

Sincerely,
TERRACON CONSULTANTS WESTERN, INC.

Prepared by:



Eric S. Willis, P.E.
Project Geotechnical Engineer



Reviewed by:



Larry G. O'Dell, P.E.
Division Manager

Copies to: Addressee (3)

Offices of The Terracon Companies, Inc.

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Geotechnical, Environmental and Materials Engineers

QUALITY ENGINEERING SINCE 1965

PRELIMINARY GEOTECHNICAL ENGINEERING REPORT

PROPOSED COMMERCIAL/INDUSTRIAL DEVELOPMENT NORTHWEST CORNER OF STATE HIGHWAY NO. 7 AND WCR NO. 3 WELD COUNTY, COLORADO

**PROJECT NO. 22975061
May 30, 1997**

INTRODUCTION

This report contains the results of our preliminary geotechnical engineering exploration for the proposed commercial/industrial development to be located on the northwest corner of State Highway No. 7 and Weld County Road No. 3 south of the Town of Erie, Colorado. The site is located in the Southeast 1/4 of Section 31, Township 1 North, Range 68 West of the 6th Principal Meridian in Weld County, Colorado.

The purpose of these services is to provide general information and preliminary geotechnical engineering recommendations relative to:

- subsurface soil and bedrock conditions
- groundwater conditions
- general earthwork considerations
- utility construction
- foundation construction
- floor slab construction
- pavement construction

The conclusions and recommendations contained in this report are based upon the results of limited field and laboratory testing, engineering analyses, our experience with similar soil conditions, and our understanding of the proposed development. The preliminary recommendations presented in this report are intended for planning purposes. A design level geotechnical exploration will be required on each building site in order to design and construct foundations and floor slabs.

PROPOSED CONSTRUCTION

We understand that the project site will be developed for a commercial/light-industrial park. Paved streets will be constructed to provide access to the building. Underground utilities will also be installed below the streets. The size and type of building construction is not known at this time. We anticipate that future buildings will probably be single to two-story structures with

slab-on-grade construction preferred. Final site grading plans were not available for review prior to preparation of this report, therefore the magnitude of possible fills or cuts is not known at this time. However, considering the variable site topography, significant cuts and fills at some locations will probably be required to achieve final construction grades.

SITE EXPLORATION

The scope of the services performed for this project included site reconnaissance by a geotechnical engineer, a subsurface exploration program, laboratory testing and engineering analysis.

Field Exploration

A total of 13 test borings were drilled on May 14, 1997 to depths of about 15 to 25 feet at the locations shown on the Site Plan, Figure 1. All borings were advanced with a truck-mounted drilling rig, utilizing 4-inch diameter solid stem auger. The borings were located in the field by measurements with a survey wheel from property boundaries and/or existing site features. Approximate surface elevations were taken at each boring location by interpolation from contours indicated on the site plan provided. The accuracy of boring locations and elevations should only be assumed to the level implied by the methods used.

Continuous lithologic logs of each boring were recorded by the geotechnical engineer during the drilling operations. At selected intervals, samples of the subsurface materials were taken by driving split-spoon and California barrel samplers. Penetration resistance measurements were obtained by driving the split-spoon or California barrel into the subsurface materials with a 140-pound hammer falling 30 inches. The penetration resistance value is a useful index to the consistency, relative density or hardness of the materials encountered. Groundwater measurements were made in each boring at the time of site exploration, and 13 days after drilling.

Laboratory Testing

All samples retrieved during the field exploration were returned to the laboratory for observation by the project geotechnical engineer, and were classified in accordance with the Unified Soil Classification System described in Appendix C. Samples of bedrock were classified in accordance with the general notes for Bedrock Classification. At that time, the field descriptions were confirmed or modified as necessary and an applicable laboratory testing program was formulated to determine general engineering properties of the subsurface materials. Boring logs were prepared and are presented in Appendix A.

Selected soil and bedrock samples were tested for the following engineering properties:

- Water content
- Dry density
- Swell-consolidation
- Unconfined compressive strength
- Grain size
- Plasticity Index

Laboratory test results are presented in Appendix B, and were used for the geotechnical engineering analyses, and the development of foundation and earthwork recommendations. All laboratory tests were performed in general accordance with the applicable ASTM, local or other accepted standards.

SITE CONDITIONS

The project site is located at the northwest corner of State Highway No. 7 and Weld County Road No. 3 (Bonanza Drive) and is currently vacant. Erie Air Park Subdivision borders the northern side of the property while an existing business is located to the east of the site. Vacant land is located to the south, across State Highway No. 7, and to the west of the property. The project site is marked by a large soil stockpile which is situated in the northwest corner of the property. The ground surface at the site is relatively irregular and is characterized by a ridge which runs in an east-west direction down the center of the property. The relative high-point of the site is located on the eastern edge of the property near the center of the site. From this point, the ground surface slopes down toward the west, south and northwest. Review of topographic maps provided indicates a maximum difference in elevation of about 90 to 95 feet across the site. Site slopes are estimated to vary between about 1½ to 20 percent. The ground surface was vegetated with a moderate to dense coverage of native weeds and pasture grasses. Other features of significance on or adjacent to the property included a sandstone bedrock outcrop to the north of our Test Boring 3 on the adjacent property and a large, dry gulch which traverses the southwestern corner of the site.

SUBSURFACE CONDITIONS

Geology

The project area is located within the Colorado Piedmont section of the Great Plains physiographic province. The Colorado Piedmont, formed during Late Tertiary and Early Quaternary time (approximately 2,000,000 years ago), is a broad, erosional trench which separates the Southern Rocky Mountains from the High Plains. Structurally, the site lies along the western flank of the Denver Basin. During the Late Mesozoic and Early Cenozoic Periods (approximately 70,000,000 years ago), intense tectonic activity occurred, causing the uplifting of the Front Range and associated downwarping of the Denver Basin to the east. Relatively flat

uplands and broad valleys characterize the present-day topography of the Colorado Piedmont in this region:

Surficial geologic conditions at the site, as mapped by the U.S. Geological Survey (USGS) (¹Colton & Anderson, 1977), consist of Loess of Pleistocene age. These materials generally consist of windblown clay, silt and sand. These materials have been reported to exhibit a tendency for some collapse when loaded and moisture content is elevated. Maximum thickness of this sequence has been reported to be on the order of 10 to 15 feet. Bedrock underlying the surface units consists of the Laramie formation of the Upper Cretaceous age. The upper part of the Laramie Formation in the area has been reported to include mostly claystone shale, sandy shale and scattered lenticular beds of sandstone and lignite. The lower part of the formation is a light-gray to buff sandstone interbedded with clay, shale and coal beds. The formation has been an important source for underground mining of coal in the past. Potential problems exist from subsidence of undermined areas. The finer-grained units within the formation may produce low to very high swelling pressures when moisture content is elevated. The thickness of this unit has been reported to be on the order of 600 to 750 feet.

Mapping completed by the Colorado Geological Survey (²Amuedo and Ivey, 1975), indicates a small portion of the site in the northeastern corner of the property is in an area of "Severe Subsidence Hazard" and a small portion of the site in the northwestern corner of the property is in an area of "Low Subsidence Hazard" due to previous coal mining activities. Evaluation of risk associated with subsidence at the site is beyond the scope of this report. If the owner is concerned about the potential for such subsidence hazards, other studies should be undertaken.

Mapping completed by the Colorado Geological Survey (³Hart, 1972), indicates that the site is in an area of "High to Very High Swell Potential". Site specific swell testing indicates that the claystone bedrock generally has high swell potential while the overburden soils typically have low swell potential and exhibit a tendency for some collapse when loaded and inundated with

¹Roger B. Colton & Larry W. Anderson, 1977 *Preliminary Geologic Map of the Erie Quadrangle, Boulder, Weld, and Adams Counties, Colorado*, United States Geological Survey, Map MF-882.

²Amuedo & Ivey, 1975, *Ground Subsidence and Land-Use Considerations Over Coal Mines in the Boulder-Weld Coal Field, Colorado*, Colorado Geological Survey, Environmental Geology No. 9.

³Hart, Stephen S., 1972, *Potentially Swelling Soil and Rock in the Front Range Urban Corridor, Colorado*, Colorado Geological Survey, Environmental Geology No. 7.

water. Potentially expansive materials mapped in this area include bedrock, weathered bedrock and colluvium (surficial units).

Soil and Bedrock Conditions

As presented on the Logs of Boring, a thin mantle of soil with root growth was encountered at the surface in all of our test borings. Near surface soils to depths of about 1½ to 12½ feet consisted primarily of fine grained silty and clayey sands. Some of the clayey sands appeared to transition into sandy silty clays at some boring locations. Sedimentary bedrock was found at the surface or below the overburden soils at depths ranging from 1½ to 12½ feet in all of our borings. The bedrock consisted of either high plasticity claystone, fine-grained sandstone, or interbedded siltstone, sandstone and claystone. Please refer to the Logs of Boring for more comprehensive strata descriptions.

Field and Laboratory Test Results

Field penetration test results indicate that the sand soils vary from very loose to medium dense in terms of relative density. Weathered bedrock was encountered at the contact between the overburden soils and the bedrock stratum in some of our borings; however, the underlying claystone bedrock varies from firm to hard with hardness generally increasing with depth. The competent sandstone bedrock found in our borings varies from hard to very hard in hardness. A very hard, well cemented layer of sandstone (caprock) was found in Test Boring 7 at depths ranging from about 12 to 14 feet.

Laboratory test results indicate that the on-site soils/bedrock have variable engineering characteristics. The near surface silty and clayey sands are typically non-expansive and exhibit a tendency for some collapse when loaded and inundated with water. These potentially collapsible soils can be distinguished by their low dry densities, low moisture contents and porous soil structure. The dry density of the clayey and silty sands tested varied between 89 to 101 pcf at moisture contents ranging from 3 to 7 percent. Unconfined compressive strength of relatively cohesive sand samples varied from 2,590 to 6,320 psf. Wash sieve analysis tests performed on selected sand samples indicated between 14 to 42 percent silt and clay size materials (material passing the No. 200 sieve). Swell-consolidation test results indicate that the claystone bedrock has moderate to very high swell potential when wetted. The sandstone bedrock is considered to be non-expansive. Based on the physical properties of the clayey and silty sands and the sandstone bedrock and on our experience, we judge that fill derived from these materials will be non-expansive or have low swell potential if it is moisture conditioned and compacted at or near optimum moisture content. We judge that fill derived from the

claystone bedrock will have at least moderate swell potential if it is moisture conditioned and compacted at optimum moisture content or above.

Groundwater Conditions

Groundwater was not observed in our test borings at the time of our field exploration, nor when checked 13 days after drilling. These observations represent only current groundwater conditions, and may not be indicative of other times, or at other locations. Groundwater levels can be expected to fluctuate with varying seasonal and weather conditions. Zones of perched and/or trapped groundwater may also occur at times in the subsurface soils overlying bedrock, on top of the bedrock surface or within permeable fractures in the bedrock materials. The location and amount of perched water is dependent upon several factors, including hydrologic conditions, type of site development, irrigation demands on or adjacent to the site, fluctuations in water features, and seasonal and weather conditions.

Based upon review of U.S. Geological Survey Maps (⁴Hillier, et al, 1983), regional groundwater beneath the project area predominates in colluvial or windblown materials, or in fractured weathered consolidated sedimentary bedrock located at a depth near ground surface. Seasonal variations in groundwater conditions are expected since the aquifer materials may not be perennially saturated. Groundwater is generally encountered at depths ranging from 5 to 20 feet below ground surface; depth to seasonal groundwater is generally 10 feet or less.

SITE DEVELOPMENT AND GEOTECHNICAL CONSIDERATIONS

Based upon the geotechnical conditions encountered in our test borings, the site appears suitable for the proposed construction. We believe that the primary geotechnical condition which will influence development of the site and foundation, floor slab and pavement construction is the presence of near surface, high swelling claystone bedrock. Other geotechnical concerns of a lesser degree include the type of material used for site grading fill, potentially collapsible soils and layers of very hard, well cemented sandstone which may require blasting to advance excavations. These concerns and other site development considerations are briefly discussed in the following sections.

General Site Grading Recommendations

Final site grading plans were not available for review at the time this investigation was performed. We should review site grading plans when they become available. The ground

⁴Hillier, Donald E.; Schneider, Paul A., Jr.; and Hutchinson, E. Carter, 1983. *Depth to Water Table (1979) in the Boulder-Fort Collins-Greeley Area, Front Range Urban Corridor, Colorado*, United States Geological Survey, Map I-855-1.

surface in the area of proposed fill placement should be stripped of vegetation and organic matter. We anticipate cuts on the order of 8 to 10 inches will be needed for adequate stripping. Organic or other unsuitable material should be wasted from the site or stockpiled and used to revegetate landscape areas or exposed slopes after completion of grading operations. If it is necessary to dispose of organic materials on-site, they should be placed in non-structural areas and in fill sections not exceeding 5 feet in height. For permanent slopes in compacted fill or cut areas we recommend slopes of 3:1 (horizontal to vertical), or less to reduce erosion and maintenance problems. If steeper slopes are required for site development, stability analyses should be completed to design the grading plan. The subgrade beneath proposed fill areas should be scarified, moisture conditioned within 2 percent of optimum moisture content and compacted to at least 95 percent of the standard Proctor maximum dry density (ASTM D 698).

The on site soils and processed bedrock or approved low swelling import materials can be used for site grading fill. The properties of the fill will affect the performance of foundations, slabs-on-grade and pavements. Selective grading should be considered where practicable to reduce the potential for increased foundation and or slab construction costs as a result of grading operations. For instance, potentially expansive materials (such as claystone) should not be used for site grading fill where swelling soils/bedrock do not presently exist or if the claystone has to be used, it should be placed in the bottom portion of deep fills. Based on our preliminary information, this would be particularly appropriate for the approximate area bounded by Test Borings 2, 3, 4, 5, 6, 7 and 8 in the central and northern portions of the site.

Sloping areas steeper than 5:1 (horizontal:vertical) which will receive fill should be benched to reduce the potential for slippage between existing slopes and fills. The fill should be placed in thin, loose lifts and compacted. Spreading and "wind-rowing" of wet soils or moisture addition and uniform mixing of dry soils will be very important. We recommend fill placed at the site which consists of the silty or clayey sands or processed sandstone bedrock be moisture conditioned within 2 percent of optimum moisture content (unless modified by the geotechnical engineer). Fill derived from the claystone bedrock should be moisture conditioned to optimum to 3 percent above optimum moisture content. Fill should be compacted to at least 95 percent of the standard Proctor maximum dry density (ASTM D 698). If fill depths exceed 12 feet, we recommend the portion deeper than 12 feet be moisture conditioned within 2 percent of optimum moisture content and compacted to at least 100 percent of the standard Proctor maximum dry density (ASTM D 698). Placement and compaction of fill should be observed and tested by the geotechnical engineer to verify that the specified moisture and compaction requirements have been achieved.

Utility Construction

Excavations into the on-site soils/bedrock will encounter a variety of conditions. Excavations into the clayey sands and bedrock can be expected to stand on relatively steep temporary slopes during construction. However, caving silty sands may also be encountered which may require flatter slope inclinations. The individual contractor(s) should be made responsible for designing and constructing stable, temporary excavations as required to maintain stability of both the excavation sides and bottom. All excavations should be sloped or shored in the interest of safety following local, and federal regulations, including current OSHA excavation and trench safety standards. As a safety measure, it is recommended that all vehicles and soil piles be kept to a minimum lateral distance from the crest of the slope equal to no less than the slope height.

Based on the subsurface conditions encountered in our test borings it does not appear that temporary dewatering will be required during placement of the pipe and during backfilling operations. Some of our borings found very hard layers of well cemented sandstone (caprock). These conditions may require the use of specialized heavy-duty equipment, together with drilling and blasting to advance the excavation. All piping should be adequately bedded for proper load distribution and to prevent damage during compaction operations. Backfill should consist of the on-site soils or existing bedrock. If bedrock is used, all plus 6-inch material should be removed from it prior to its use. Utility trench backfill should be moisture conditioned at or near optimum moisture content and should be compacted to at least 95 percent of the standard Proctor maximum dry density (ASTM D698).

The soils to be penetrated by the proposed excavations may vary significantly across the site. The preliminary soil classifications are based solely on the materials encountered in widely spaced exploratory test borings. The contractor should verify that similar conditions exist throughout the proposed area of excavation. If different subsurface conditions are encountered at the time of construction, we recommend that we be contacted immediately to evaluate the conditions encountered.

Foundation Construction Considerations

Foundation selection will be dependent upon the type of construction planned, site specific geotechnical conditions and final site grading configurations. Preliminary data from this exploration indicates that the near surface clayey and silty sand soils found in our test borings have low load bearing capability, are typically non-expansive and exhibit a tendency for some collapse when loaded and inundated with water. For these conditions and where high swelling claystone is well below the foundation level, relatively large, low contact pressure spread

footings usually perform satisfactorily provided site grading fill is controlled to non-expansive to low swell potential. Where the sandstone bedrock is encountered at foundation bearing depths and the high swelling claystone is well below this level, conventional spread footing construction could be used for support of the proposed building. Depending upon site specific subsurface conditions and collapse potential, movement sensitive structures or buildings with heavy foundation loads may require the use of a drilled pier foundation system to control excessive settlement/collapse.

Preliminary data from this exploration indicates that the claystone bedrock found in Borings 1, 9, 10, 11, 12 and 13 has moderate to very high swell potential. Claystone bedrock in these borings was found at depths ranging from ½ to 6 feet below the ground surface. For these conditions, grade beams and straight shaft piers drilled into the bedrock should be anticipated for support of the proposed buildings. Minimum shaft lengths on the order of 20 feet with minimum bedrock penetrations of at least 5 feet should be expected for high swelling areas of the site. Based on the subsurface conditions, it appears that pier drilling should be possible with conventional drilling equipment on most of the site and that temporary casing of the drill holes will probably not be required. The very hard, well cemented sandstone layers may require the use of a core barrel and large drill rig to penetrate these lenses.

A more detailed, site specific geotechnical exploration will be necessary for each building lot to develop specific foundation and floor construction recommendations after site grading is complete and final building locations and type of construction have been established.

Slab-on-Grade Construction

Subsoils at the site consist of either non-expansive to low swelling silty to clayey sands or sandstone bedrock (Borings 2, 3, 4, 5, 6, 7 and 8) or moderate to very high swelling claystone bedrock (Borings 1, 9, 10, 11, 12 and 13). Based on the physical properties of the clayey and silty sands and the sandstone bedrock and on our experience, we judge that fill derived from these materials will be non-expansive or have low swell potential if it is moisture conditioned and compacted at or near optimum moisture content. We judge that fill derived from the claystone bedrock will have at least moderate swell potential if it is moisture conditioned and compacted at optimum moisture content or above. The properties of site grading fill will affect the performance and design and construction recommendations of slabs-on-grade at the site. The use of slab-on-grade floors for non-expansive or low swelling soils is generally considered acceptable provided some movement of floors can be tolerated. For movement sensitive floors or equipment, slab heave resulting from low swelling soils could be excessive in some instances. Where slab movement must be held to a minimum or high swelling claystone bedrock is encountered at or near the level of the slab, the only reliable solution to eliminate

floor heave, cracking and possible structural damage is the use of structural floors supported independent of the subgrade soils. Structurally supported floor systems are not common for buildings with large floor areas primarily because of economic considerations. A common practice in this area to reduce potential slab heave, involves overexcavation of the expansive materials and replacement with non-expansive or low swelling on-site or import materials. This alternative will not eliminate the possibility of slab heave; however, movements should be reduced and would tend to be more uniform. Swell potential should be more thoroughly defined during design level geotechnical explorations.

Pavement Construction

The required total thickness for the pavement structure is dependent primarily upon the foundation soil or subgrade and upon traffic conditions. Results of gradation and plasticity tests on selected samples indicate that the subgrade soils classified as A-6, A-7-5 and A-2-4 according to the AASHTO classification system. AASHTO group indices of these subgrade soils ranged from 0 to 33. Soil classification test results and other physical properties indicate that the subgrade soils at the site are variable and generally have fair to poor pavement support characteristics.

The preliminary pavement thicknesses presented are based on minimum design criteria and traffic numbers outlined in the Town of Erie design manual. For planning purposes, we anticipate pavement sections for the industrial streets at the site would consist of either 7 to 8 inches of full-depth asphalt or 5 inches of asphalt over 7 to 11 inches of aggregate base course. The expansive nature of the some of the subgrade (shallow claystone) indicates poor serviceability for concrete pavements. We estimate concrete pavements constructed on high swelling subgrade will heave on the order of 2 to 3 inches differentially and will create a maintenance problem. For this reason, we do not recommend concrete pavement for high swelling areas of the site.

The pavement sections presented herein are for preliminary planning purposes for the project. Final pavement design, upon completion of site grading, will be required to meet Town of Erie requirements. The final design will account for variations in pavement subgrade soils which may occur in cut/fill sections required to bring the site to construction grade and along the actual alignment of the streets within the project. Accordingly, the actual required pavement thickness may vary from those presented.

GENERAL COMMENTS

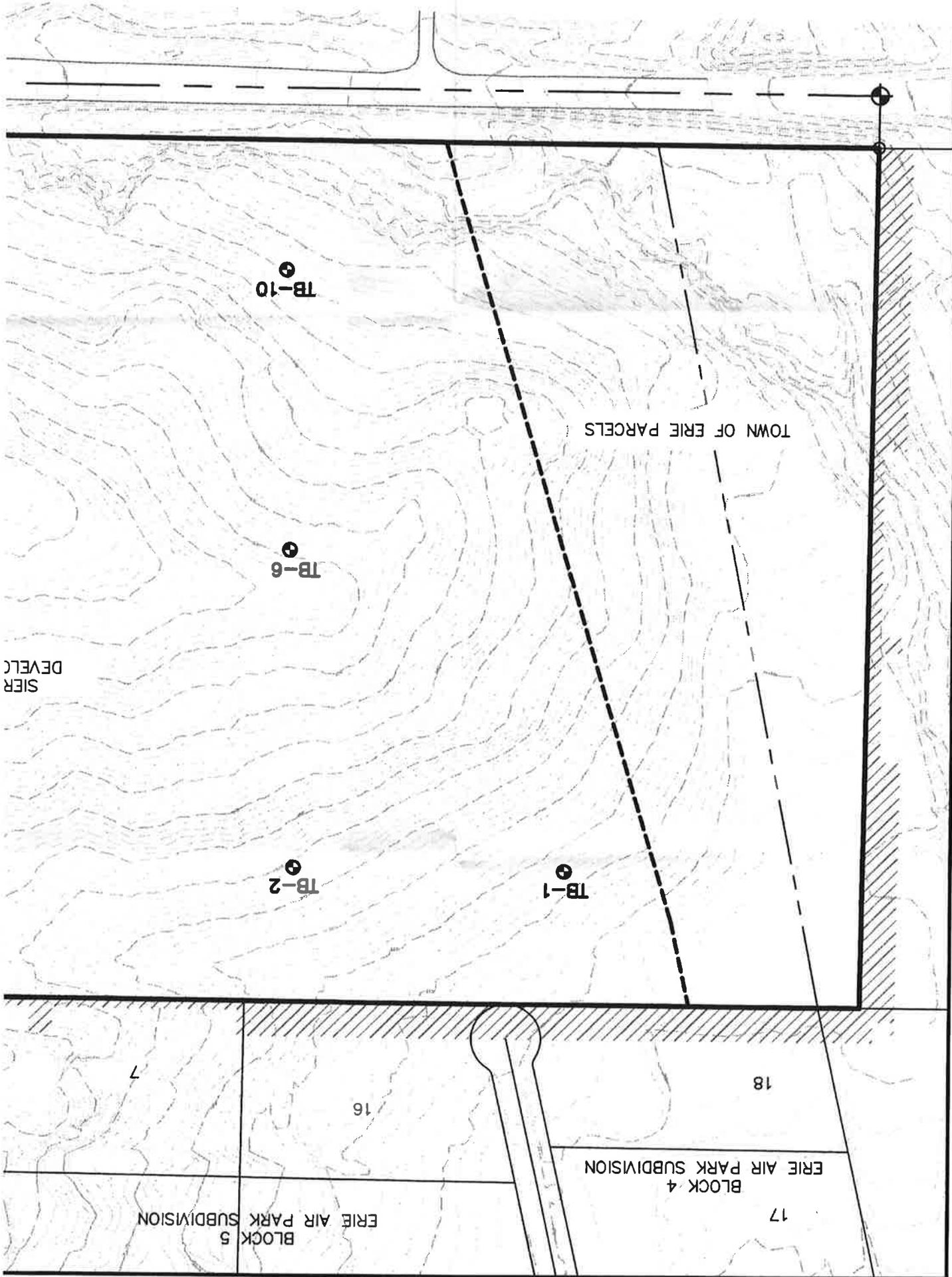
Terracon Consultants Western, Inc. should be retained to review the final design plans and specifications so comments can be made regarding interpretation and implementation of our geotechnical recommendations in the design and specifications. Terracon also should be retained to provide testing and observation during excavation, grading, foundation and construction phases of the project.

The analyses and recommendations in this report are based in part upon data obtained from the borings performed at the indicated locations and from other information discussed in this report. This report does not reflect variations which may occur between borings or across the site. The nature and extent of such variations may not become evident until construction. If variations appear, it will be necessary to reevaluate the recommendations of this report. The preliminary recommendations presented in this report are intended for planning purposes. A design level geotechnical exploration will be required on each building site in order to design and construct foundations and floor slabs.

The scope of services for this project does not include either specifically or by implication any environmental assessment of the site or identification of contaminated or hazardous materials or conditions. If the owner is concerned about the potential for such contamination, other studies should be undertaken.

This report has been prepared for the exclusive use of our client for specific application to the project discussed and has been prepared in accordance with generally accepted geotechnical engineering practices. No warranties, either express or implied, are intended or made. In the event that changes in the nature, design or location of the project are outlined in this report, are planned, the conclusions and recommendations contained in this report shall not be considered valid unless Terracon reviews the changes and either verifies or modifies the conclusions of this report in writing.

APPENDIX A



PHYSICAL PROPERTIES
Proposed Industrial Development - Northwest Corner of State Highway No. 7 and WCR 3
TCW Project No. 22975061

Boring No.	Depth (ft)	Soil Class.	Particle Size Distribution, % Passing by Weight				Atterberg Limits		Moisture-Density Relationship			Specific Gravity	Water Soluble Matter, (%)		Corrected R-Value	Remarks	
			3"	#4	#10	#40	#200	LL	PI	Dry Density (pcf)	Optimum Moisture (%)		Method	Salts			Sulfates
1	14	A-7-6(33) CH Claystone					86.0	61	34								2
2	2	A-2-4(0) SM Sandstone	100	100	100	99	14.3	NP	NP								2
5	8	A-2-4(0) SC	100	99	97	96	30.6	23	8								2
7	3	A-6(2) SC	100	100	100	99	41.5	28	13								2
10	14	A-6(7) CL Claystone					61.2	35	16								2

REMARKS:

Classification/Particle Size

1. Visual
2. Laboratory Tested
3. Minus #200 Only

Moisture-Density Relationship

4. Tested ASTM D698/AASHTO T99
5. Tested ASTM D1557/AASHTO T180

Specific Gravity

6. Minus #4
7. Plus #4

Permeability

8. Constant Head
9. Falling Head

R-Value

10. Expansion Pressure ___ psf
11. Exudation Pressure ___ psi

Note: NP = nonplastic

Terracon

LOG OF BORING NO. TB-1

OWNER/CLIENT Pratt Management Company, LLC		ARCHITECT/ENGINEER	
SITE NW Corner of State HWY 7 & WCR 3 Erie, Colorado		PROJECT Proposed Industrial Development	
GRAPHIC LOG	DESCRIPTION	DEPTH (FT.)	USCS SYMBOL
	Approx. Surface Elev.: 5128.0 ft.		SAMPLES
0.5	TOPSOIL	5127.5	
1.5	CLAYEY SAND, silty, light brown, dry, loose.	5126.5	SC
			SS 7
			CB 36
		5	14 115
			+6.7/50)
			CB 50/9
		10	
			CB 50/9
		15	16 115
			+8.0/50)
			SS 50/10
		20	
			SS 50/11
		25	
25.0	BOTTOM OF BORING	5103.0	

CLAYSTONE, high plasticity, dark gray to mottled gray, brown and rust, slightly moist to moist, calcareous, medium hard to hard.

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: IN-SITU, THE TRANSITION MAY BE GRADUAL.

WATER LEVEL OBSERVATIONS			
WL	☒	Dry 5/14/97	☒
WL	☒	Dry 5/27/97	
WL			



BORING STARTED		5-14-97	
BORING COMPLETED		5-14-97	
RIG	B-57	FOREMAN	CVS
APPROVED	ESW	JOB #	22975061

LOG OF BORING NO. TB-2

OWNER/CLIENT Pratt Management Company, LLC		ARCHITECT/ENGINEER										
SITE NW Corner of State HWY 7 & WCR 3 Erie, Colorado		PROJECT Proposed Industrial Development										
GRAPHIC LOG	DESCRIPTION	DEPTH (FT.)	USCS SYMBOL	SAMPLES			TESTS					
				NUMBER	TYPE	PENETRATION BLOWS	MOISTURE, %	DRY DENSITY (PCF)	UNCONFINED COMPRESSIVE STRENGTH (PSF)	%SWELL-CONSOLIDATION / SURCHARGE LOAD (PSF)	FREE SWELL (PSF)	
	Approx. Surface Elev.: 5145.0 ft.											
	0.5 TOPSOIL 5144.5											
	SANDSTONE, slightly silty, fine-grained, poorly cemented, light gray to tan and rust, dry to slightly moist, hard to very hard.	5										
		10										
	15.0 5130.0	15										
	BOTTOM OF BORING											

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: IN-SITU, THE TRANSITION MAY BE GRADUAL.

WATER LEVEL OBSERVATIONS			
WL	▽	Dry 5/14/97	▽
WL	□		
WL			



BORING STARTED		5-14-97	
BORING COMPLETED		5-14-97	
RIG	B-57	FOREMAN	CVS
APPROVED	ESW	JOB #	22975061

LOG OF BORING NO. TB-3

OWNER/CLIENT Pratt Management Company, LLC		ARCHITECT/ENGINEER								
SITE NW Corner of State HWY 7 & WCR 3 Erie, Colorado		PROJECT Proposed Industrial Development								
GRAPHIC LOG	DESCRIPTION Approx. Surface Elev.: 5156.0 ft.	DEPTH (FT.)	SAMPLES		TESTS					
			USCS SYMBOL	NUMBER	TYPE	PENETRATION BLOWS	MOISTURE, %	DRY DENSITY (PCF)	UNCONFINED COMPRESSIVE STRENGTH (PSF)	%SWELL-CONSOLIDATION / SURCHARGE LOAD (PSF)
0.5	TOPSOIL	5155.5								
1.5	SILTY TO CLAYEY SAND, light brown to tan, dry.	5154.5	SC SM							
				CB	50/5					
				CB	50/5					
				SS	50/4					
15.0	BOTTOM OF BORING	5141.0								

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: IN-SITU, THE TRANSITION MAY BE GRADUAL.

WATER LEVEL OBSERVATIONS			
WL	▽	Dry 5/14/97	▽
WL	±	Dry 5/27/97	
WL			



BORING STARTED		5-14-97	
BORING COMPLETED		5-14-97	
RIG	B-57	FOREMAN	CVS
APPROVED	ESW	JOB #	22975061

LOG OF BORING NO. TB-4

OWNER/CLIENT Pratt Management Company, LLC		ARCHITECT/ENGINEER										
SITE NW Corner of State HWY 7 & WCR 3 Erie, Colorado		PROJECT Proposed Industrial Development										
GRAPHIC LOG	DESCRIPTION	DEPTH (FT.)	SAMPLES		TESTS							
			USCS SYMBOL	NUMBER	TYPE	PENETRATION BLOWS	MOISTURE, %	DRY DENSITY (PCF)	UNCONFINED COMPRESSIVE STRENGTH (PSF)	%SWELL-CONSOLIDATION SURCHARGE LOAD (PSF)	FREE SWELL (PSF)	
	Approx. Surface Elev.: 5170.0 ft.											
	0.5 TOPSOIL 1.5 SILTY TO CLAYEY SAND, light brown to tan, dry.	5169.5 5168.5	SC SM									
	SILTY SAND, slightly clayey, dark brown to tan, slightly moist to dry, calcareous, porous, very loose to medium dense.			CB	3							
		5										
		10	SM	CB	10	4	98		-0.4/500			
	11.5	5158.5										
	15.0 SANDSTONE, slightly silty, fine-grained, poorly cemented, tan to light gray, dry to slightly moist, very hard. BOTTOM OF BORING	5155.0		SS	50/3							

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: IN-SITU, THE TRANSITION MAY BE GRADUAL.

WATER LEVEL OBSERVATIONS			
WL	☒	Dry 5/14/97	☒
WL	☒		☒
WL			



BORING STARTED		5-14-97	
BORING COMPLETED		5-14-97	
RIG	B-57	FOREMAN	CVS
APPROVED	ESW	JOB #	22975061

LOG OF BORING NO. TB-6

OWNER/CLIENT Pratt Management Company, LLC			ARCHITECT/ENGINEER								
SITE NW Corner of State HWY 7 & WCR 3 Erie, Colorado			PROJECT Proposed Industrial Development								
GRAPHIC LOG	DESCRIPTION	DEPTH (FT.)	SAMPLES			TESTS					
			USCS SYMBOL	NUMBER	TYPE	PENETRATION BLOWS	MOISTURE. %	DRY DENSITY (PCF)	UNCONFINED COMPRESSIVE STRENGTH (PSF)	%SWELL-CONSOLIDATION SURCHARGE LOAD (PSF)	FREE SWELL (PSF)
	Approx. Surface Elev.: 5174.0 ft.										
0.5	TOPSOIL	5173.5									
3.0	SILTY SAND , slightly clayey, dark brown, moist, loose.	5171.0	SC-SM		CB	6					
		5									
					CB	50/9					
	SANDSTONE , slightly silty, fine-grained, poorly cemented, tan to light gray, dry to slightly moist, hard.										
		10									
15.0	BOTTOM OF BORING	5159.0			SS	50/8					

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: IN-SITU, THE TRANSITION MAY BE GRADUAL.

WATER LEVEL OBSERVATIONS			
WL	☒	Dry 5/14/97	☒
WL	☒	Dry 5/27/97	
WL			



BORING STARTED		5-14-97	
BORING COMPLETED		5-14-97	
RIG	B-57	FOREMAN	CVS
APPROVED	ESW	JOB #	22975061

LOG OF BORING NO. TB-7

OWNER/CLIENT Pratt Management Company, LLC		ARCHITECT/ENGINEER									
SITE NW Corner of State HWY 7 & WCR 3 Erie, Colorado		PROJECT Proposed Industrial Development									
GRAPHIC LOG	DESCRIPTION	DEPTH (FT.)	SAMPLES				TESTS				
			USCS SYMBOL	NUMBER	TYPE	PENETRATION BLOWS	MOISTURE, %	DRY DENSITY (PCF)	UNCONFINED COMPRESSIVE STRENGTH (PSF)	%SWELL-CONSOLIDATION / SURCHARGE LOAD (PSF)	FREE SWELL (PSF)
	Approx. Surface Elev.: 5192.0 ft.										
0.5	TOPSOIL	5191.5		SS	7						
8.5	5183.5	5	SC	CB	7	6	89	2590	-3.8/1K		
12.0	5180.0	10		CB	50/11						
14.0	5178.0	15		CB	50/4						
23.0	5169.0	20		SS	50/4						
25.0	5167.0	25		SS	50/6						
	BOTTOM OF BORING										

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: IN-SITU, THE TRANSITION MAY BE GRADUAL.

WATER LEVEL OBSERVATIONS			
WL	☒	Dry 5/14/97	☒
WL	☒		☒
WL			



BORING STARTED		5-14-97	
BORING COMPLETED		5-14-97	
RIG	B-57	FOREMAN	CVS
APPROVED	ESW	JOB #	22975061

LOG OF BORING NO. TB-8

OWNER/CLIENT Pratt Management Company, LLC		ARCHITECT/ENGINEER											
SITE NW Corner of State HWY 7 & WCR 3 Eric, Colorado		PROJECT Proposed Industrial Development											
GRAPHIC LOG	DESCRIPTION	DEPTH (FT.)	USCS SYMBOL	SAMPLES		TESTS							
				NUMBER	TYPE	PENETRATION BLOWS	MOISTURE, %	DRY DENSITY (PCF)	UNCONFINED COMPRESSIVE STRENGTH (PSF)	%SWELL-CONSOLIDATION / SURCHARGE LOAD (PSF)	FREE SWELL (PSF)		
	Approx. Surface Elev.: 5196.0 ft.												
0.5	<u>TOPSOIL</u>	5195.5	SC:SM										
2.0	<u>SILTY TO CLAYEY SAND</u> , brown, slightly moist.	5194.0		CB	50/11								
	<u>SANDSTONE</u> , slightly silty, fine-grained, poorly cemented, light gray with yellow, dry to slightly moist, weathered to very hard.			CB	50/4								
15.0	BOTTOM OF BORING	5181.0		SS	50/3								

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: IN-SITU, THE TRANSITION MAY BE GRADUAL.

WATER LEVEL OBSERVATIONS			
WL	≡	Dry 5/14/97	≡
WL	≡		
WL			



BORING STARTED		5-14-97	
BORING COMPLETED		5-14-97	
RIG	B-57	FOREMAN	CVS
APPROVED	ESW	JOB #	22975061

LOG OF BORING NO. TB-9

OWNER/CLIENT Pratt Management Company, LLC		ARCHITECT/ENGINEER								
SITE NW Corner of State HWY 7 & WCR 3 Erie, Colorado		PROJECT Proposed Industrial Development								
GRAPHIC LOG	DESCRIPTION	DEPTH (FT.)	SAMPLES		TESTS					
			USCS SYMBOL	NUMBER	TYPE	PENETRATION BLOWS	MOISTURE, %	DRY DENSITY (PCF)	UNCONFINED COMPRESSIVE STRENGTH (PSF)	%SWELL-CONSOLIDATION / SURCHARGE LOAD (PSF)
	Approx. Surface Elev.: 5208.0 ft.									
0.5	<u>TOPSOIL</u>	5207.5								
4.0	<u>CLAYEY SAND</u> , light brown to tan, dry to slightly moist, calcareous, porous, medium dense, varies to a sandy silty clay.	5204.0	SC	CB	12	6	95	5850	-0.6/1K	
6.0	<u>SANDSTONE</u> , slightly silty, fine-grained, poorly cemented, tan to light gray, dry to slightly moist.	5202.0								
				CB	42	11	121	17700		
13.0	<u>CLAYSTONE</u> , slightly silty and sandy, high plasticity, gray, tan and rust, moist, calcareous, medium hard.	5195.0								
				CB	50/6	13	113	6530		
25.0	<u>CLAYSTONE/SILTSTONE</u> , with sandstone interbeds, gray, tan and rust, slightly moist, calcareous, hard to very hard.	5183.0								
				CB	50/7					
	<u>BOTTOM OF BORING</u>									
				SS	50/6					

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: IN-SITU, THE TRANSITION MAY BE GRADUAL.

WATER LEVEL OBSERVATIONS			
WL	▼	Dry 5/14/97	▼
		Dry 5/27/97	
WL	▲		
WL			



BORING STARTED		5-14-97	
BORING COMPLETED		5-14-97	
RIG	B-57	FOREMAN	CVS
APPROVED	ESW	JOB #	22975061

LOG OF BORING NO. TB-10

OWNER/CLIENT Pratt Management Company, LLC		ARCHITECT/ENGINEER										
SITE NW Corner of State HWY 7 & WCR 3 Erie, Colorado		PROJECT Proposed Industrial Development										
GRAPHIC LOG	DESCRIPTION	DEPTH (FT.)	SAMPLES		TESTS							
			USCS SYMBOL	NUMBER	TYPE	PENETRATION BLOWS	MOISTURE, %	DRY DENSITY (PCF)	UNCONFINED COMPRESSIVE STRENGTH (PSF)	%SWELL-CONSOLIDATION / SURCHARGE LOAD (PSF)	FREE SWELL (PSF)	
	Approx. Surface Elev.: 5144.0 ft.											
0.5	<u>TOPSOIL</u>	5143.5	SC	SM								
3.0	<u>CLAYEY SAND</u> , medium brown, slightly moist.	5141.0			CB	27						
8.0	<u>CLAYSTONE</u> , with sandstone interbeds, silty, dark gray with tan and rust, slightly moist, firm.	5136.0			CB	50/6						
25.0	<u>SILTSTONE/SANDSTONE/CLAYSTONE</u> , interbedded, rust, brown and gray, slightly moist, hard to very hard.	5119.0			CB	50/6						
	BOTTOM OF BORING	25			SS	50/4						

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: IN-SITU, THE TRANSITION MAY BE GRADUAL.

WATER LEVEL OBSERVATIONS			
WL	▽	Dry 5/14/97	▽
		Dry 5/27/97	
WL	⊕		
WL			



BORING STARTED		5-14-97	
BORING COMPLETED		5-14-97	
RIG	B-57	FOREMAN	CVS
APPROVED	ESW	JOB #	22975061

LOG OF BORING NO. TB-11

OWNER/CLIENT Pratt Management Company, LLC				ARCHITECT/ENGINEER									
SITE NW Corner of State HWY 7 & WCR 3 Erie, Colorado				PROJECT Proposed Industrial Development									
GRAPHIC LOG	DESCRIPTION			DEPTH (FT.)	SAMPLES			TESTS					
					USCS SYMBOL	NUMBER	TYPE	PENETRATION BLOWS	MOISTURE, %	DRY DENSITY (PCF)	UNCONFINED COMPRESSIVE STRENGTH (PSF)	%SWELL-CONSOLIDATION / SURCHARGE LOAD (PSF)	FREE SWELL (PSF)
Approx. Surface Elev.: 5160.0 ft.													
0.5' <u>TOPSOIL</u> 5159.5				SC									
3.5' <u>CLAYEY SAND</u> , silty, brown, moist. 5156.5					CB	32	18	108	10530				
15.0' <u>CLAYSTONE</u> , silty and sandy, dark gray, rust and brown, slightly moist to moist, hard to very hard. 5145.0 BOTTOM OF BORING				5									
				10		CB	50/11	13	115		+1.7/500		
				15		CB	50/6						

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: IN-SITU, THE TRANSITION MAY BE GRADUAL.

WATER LEVEL OBSERVATIONS			
WL	☒	Dry 5/14/97	☒
WL	☒		☒
WL			



BORING STARTED		5-14-97	
BORING COMPLETED		5-14-97	
RIG	B-57	FOREMAN	CVS
APPROVED	ESW	JOB #	22975061

LOG OF BORING NO. TB-12

OWNER/CLIENT Pratt Management Company, LLC				ARCHITECT/ENGINEER								
SITE NW Corner of State HWY 7 & WCR 3 Erie, Colorado				PROJECT Proposed Industrial Development								
GRAPHIC LOG	DESCRIPTION			DEPTH (FT.)	SAMPLES			TESTS				
					USCS SYMBOL	NUMBER	TYPE	PENETRATION BLOWS	MOISTURE, %	DRY DENSITY (PCF)	UNCONFINED COMPRESSIVE STRENGTH (PSF)	%SWELL-CONSOLIDATION LOAD (PSF)
Approx. Surface Elev.: 5170.0 ft.												
0.5	<u>TOPSOIL</u>			5169.5								
				5		CB	23					
				10		CB	50/10	16	116		+6.8/500	
				15		CB	50/8					
	15.0	BOTTOM OF BORING			5155.0							

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: IN-SITU, THE TRANSITION MAY BE GRADUAL.

WATER LEVEL OBSERVATIONS			
WL	▼	Dry 5/14/97	▼
			Dry 5/27/97
WL	□		
WL			



BORING STARTED		5-14-97	
BORING COMPLETED		5-14-97	
RIG	B-57	FOREMAN	CVS
APPROVED	ESW	JOB #	22975061

LOG OF BORING NO. TB-13

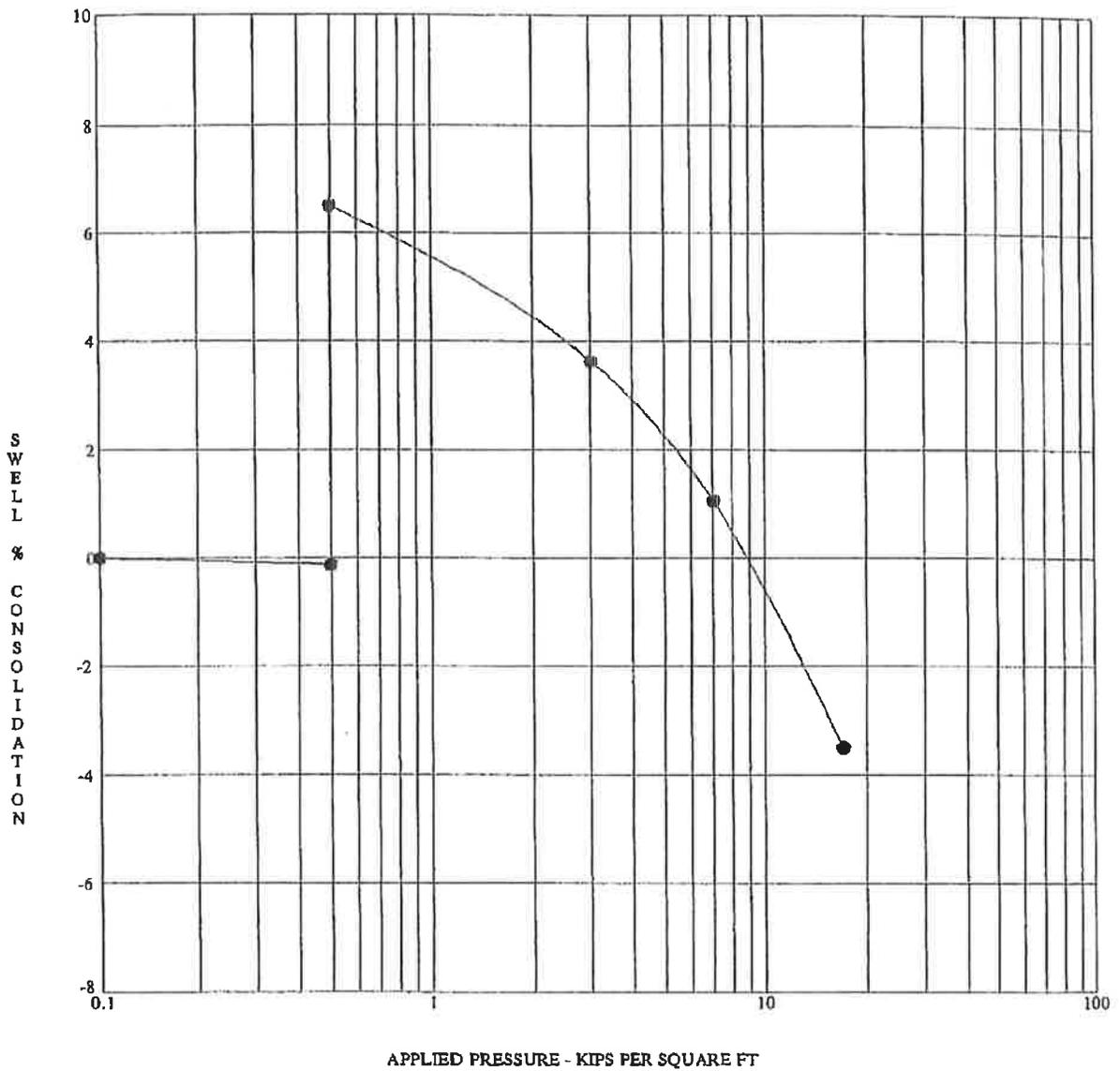
OWNER/CLIENT Pratt Management Company, LLC		ARCHITECT/ENGINEER								
SITE NW Corner of State HWY 7 & WCR 3 Erie, Colorado		PROJECT Proposed Industrial Development								
GRAPHIC LOG	DESCRIPTION Approx. Surface Elev.: 5176.0 ft.	DEPTH (FT.)	SAMPLES		TESTS					
			USCS SYMBOL	NUMBER	TYPE	PENETRATION BLOWS	MOISTURE, %	DRY DENSITY (PCF)	UNCONFINED COMPRESSIVE STRENGTH (PSF)	%SWELL-CONSOLID SURCHARGE LOAD (PSF)
	0.5 TOPSOIL 5175.5	0		SS	10					
		5		CB	31	15	113	6830		
		10		CB	50/7					
	<u>CLAYSTONE</u> , high plasticity, dark gray with black and rust, slightly moist to moist, calcareous, weathered to hard.	15		CB	50/7					
		20								
	25.0 5151.0	25		SS	50/10					
	BOTTOM OF BORING									

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: IN-SITU, THE TRANSITION MAY BE GRADUAL.

WATER LEVEL OBSERVATIONS			
WL	▽	Dry 5/14/97	▽ Dry 5/27/97
WL	□		
WL			



BORING STARTED		5-14-97	
BORING COMPLETED		5-14-97	
RIG	B-57	FOREMAN	CVS
APPROVED	ESW	JOB #	22975061

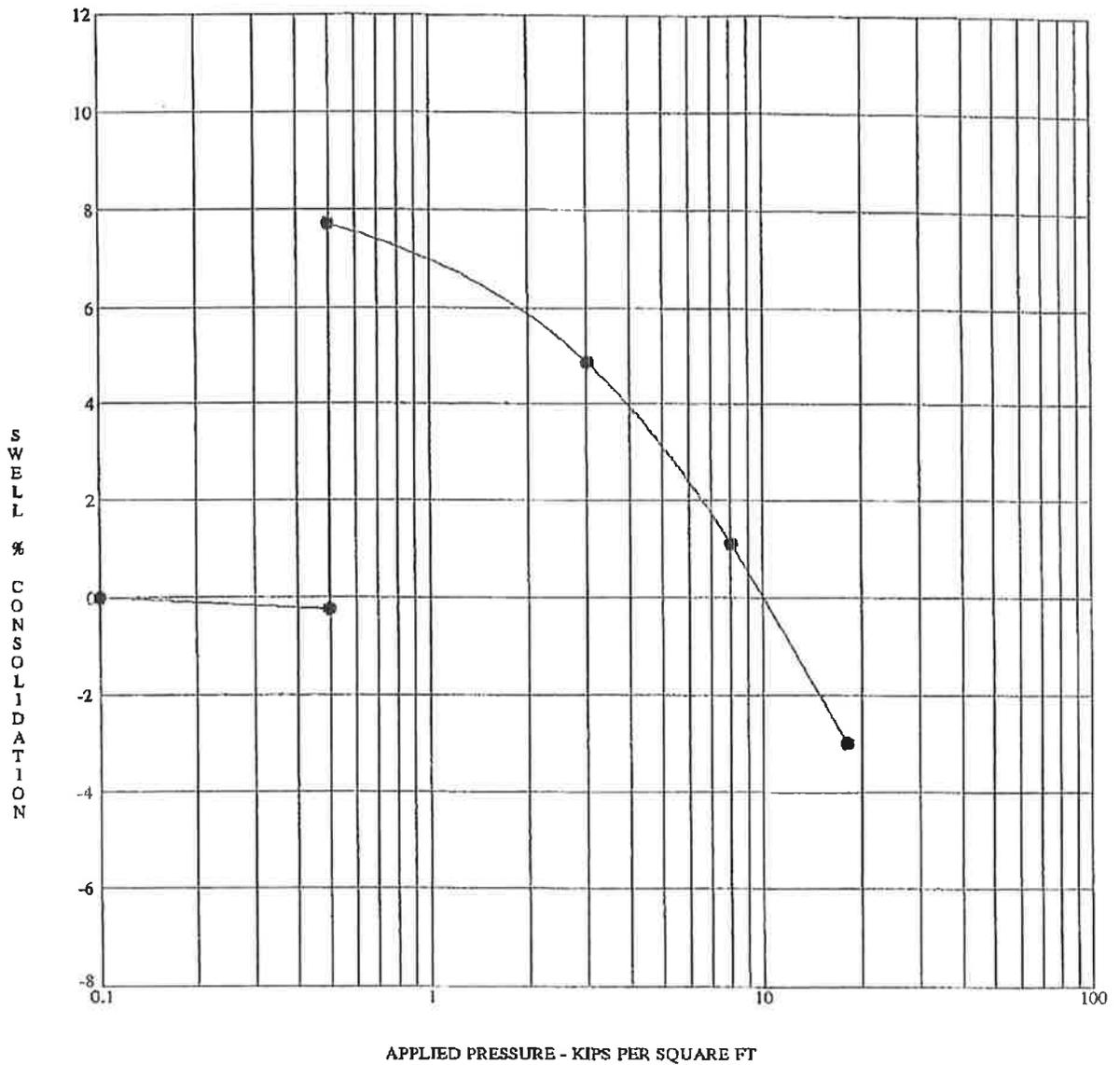


Specimen Identification	Classification	DD	MC%
● TB-1 3.0	Claystone; high plasticity	115	14

PROJECT Proposed Industrial Development - NW Corner
of State HWY 7 & WCR 3

JOB NO. 22975061
DATE 5/23/97

SWELL/CONSOLIDATION TEST
Terracon Consultants Western, Inc.
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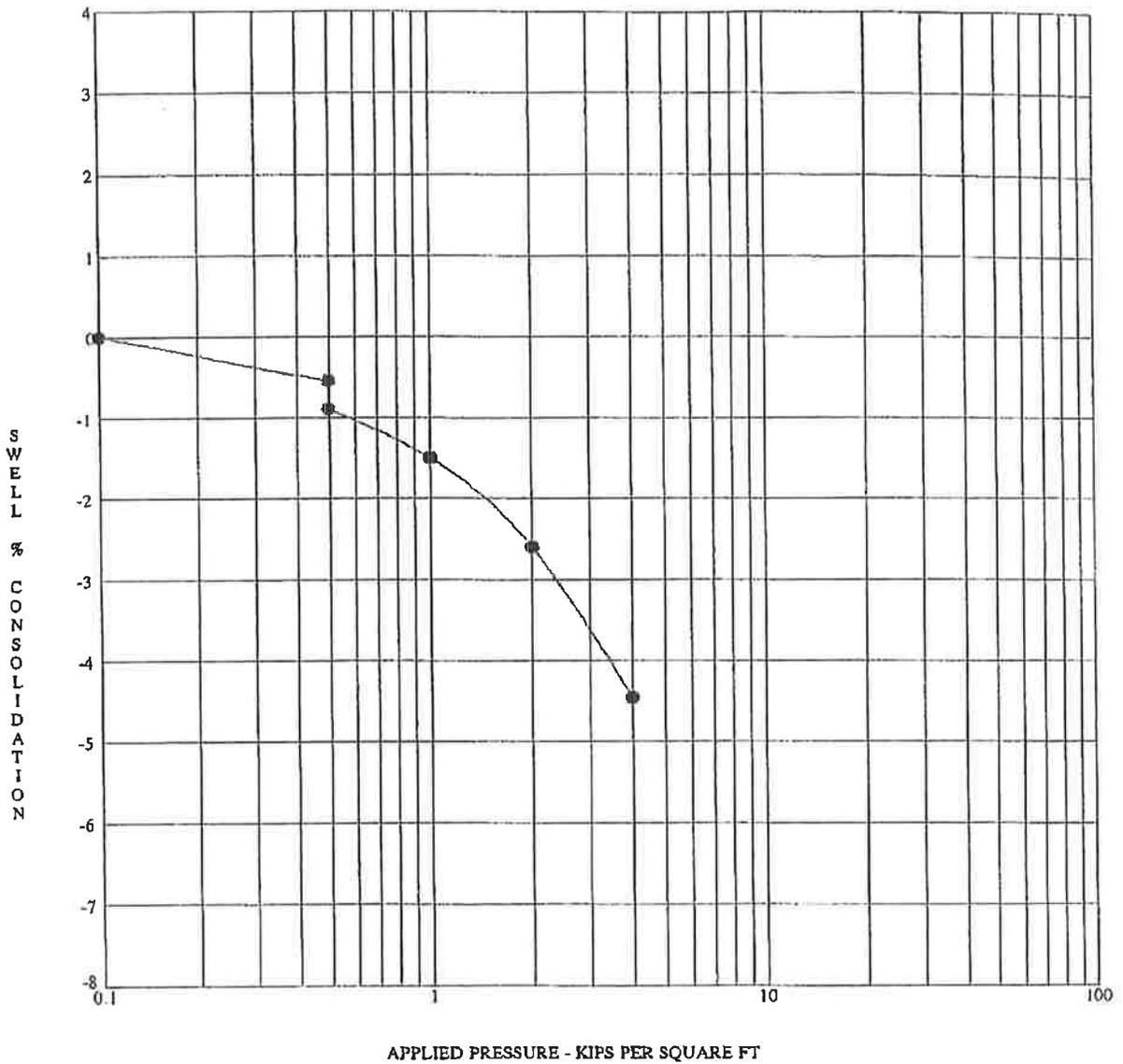


Specimen Identification	Classification	DD	MC%
● TB-1 14.0	Claystone; high plasticity	115	16

PROJECT Proposed Industrial Development - NW Corner
of State HWY 7 & WCR 3

JOB NO. 22975061
DATE 5/23/97

SWELL/CONSOLIDATION TEST
Terracon Consultants Western, Inc.
Empire Division

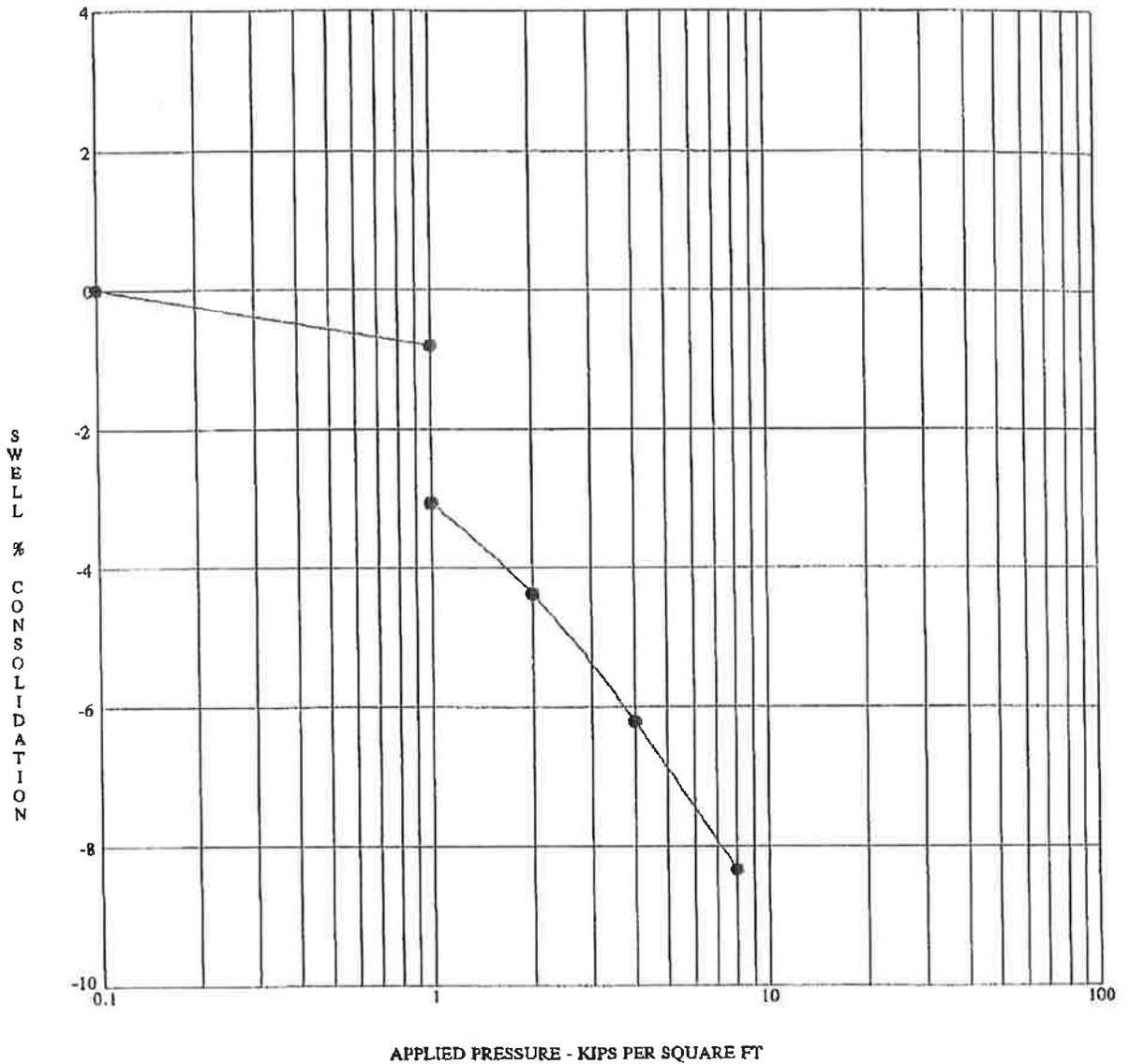


Specimen Identification	Classification	DD	MC%
● TB-4 7.0	Silty Sand; slightly clayey (SM)	98	4

PROJECT **Proposed Industrial Development - NW Corner**
of State HWY 7 & WCR 3

JOB NO. **22975061**
DATE **5/23/97**

SWELL/CONSOLIDATION TEST
Terracon Consultants Western, Inc.
Empire Division

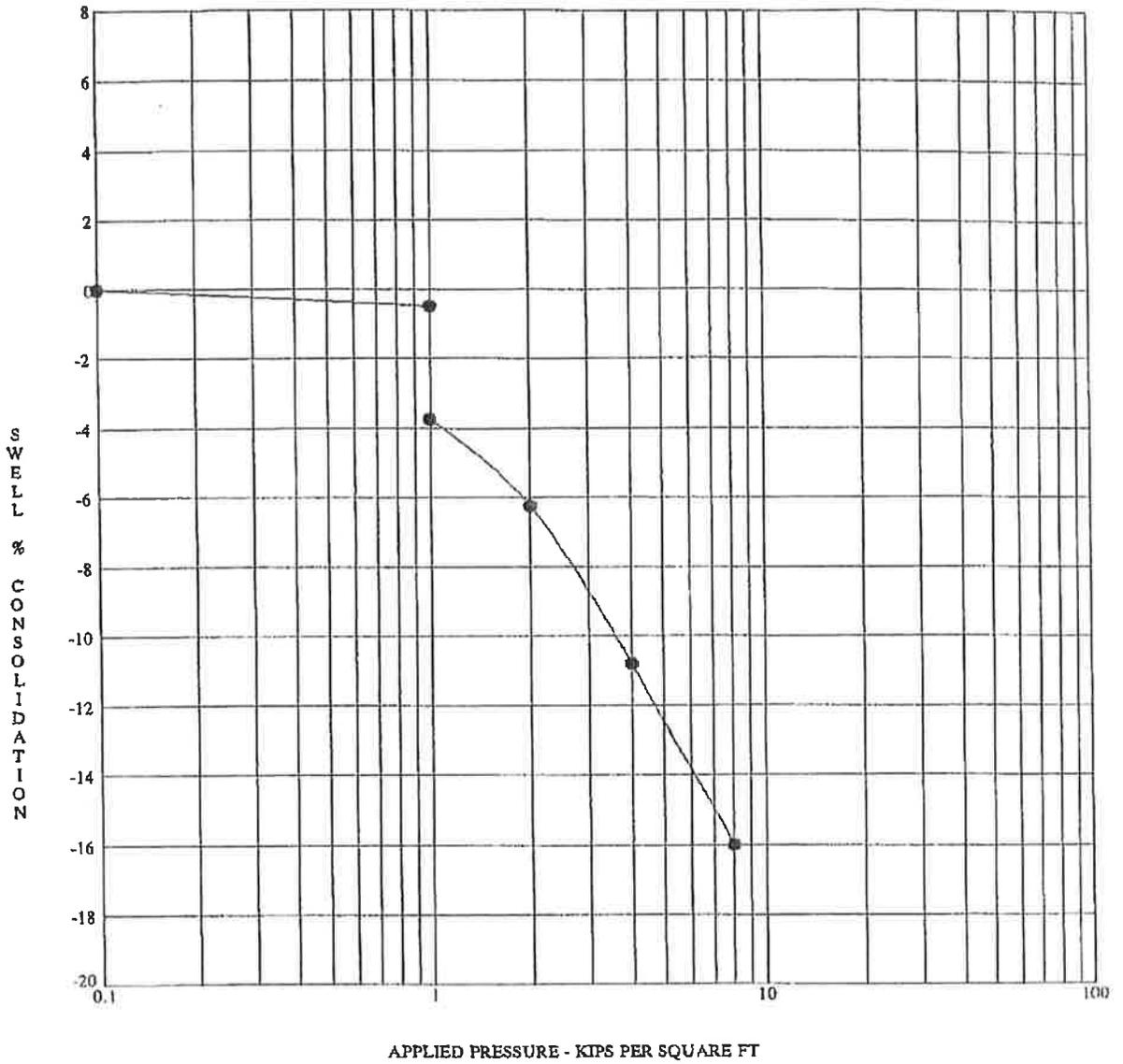


Specimen Identification	Classification	DD	MC%
● TB-5 8.0	Clayey Sand SC	100	7

PROJECT Proposed Industrial Development - NW Corner
of State HWY 7 & WCR 3

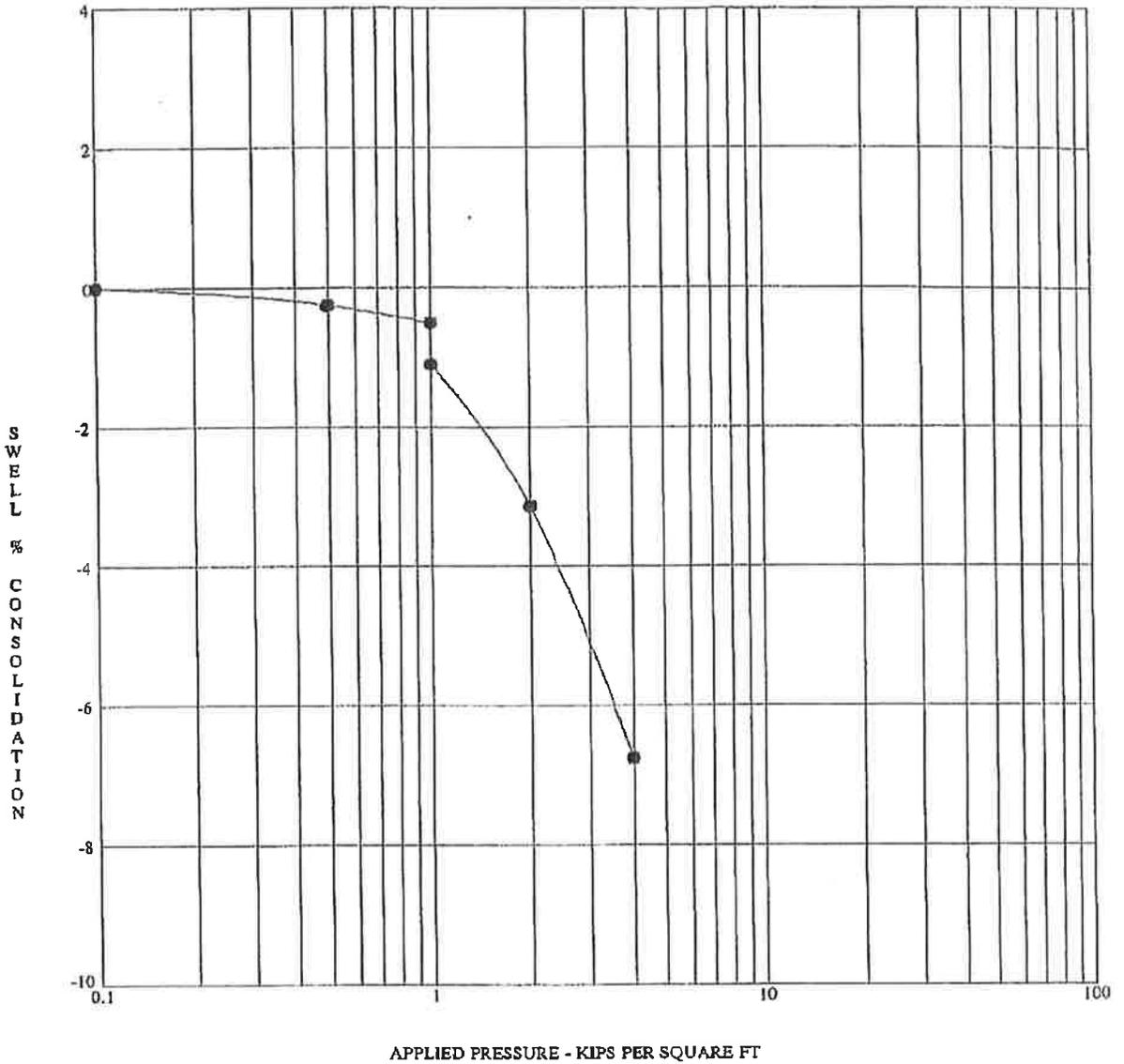
JOB NO. 22975061
DATE 5/23/97

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Specimen Identification	Classification	DD	MC %
● TB-7 3.0	Clayey Sand SC	89	6

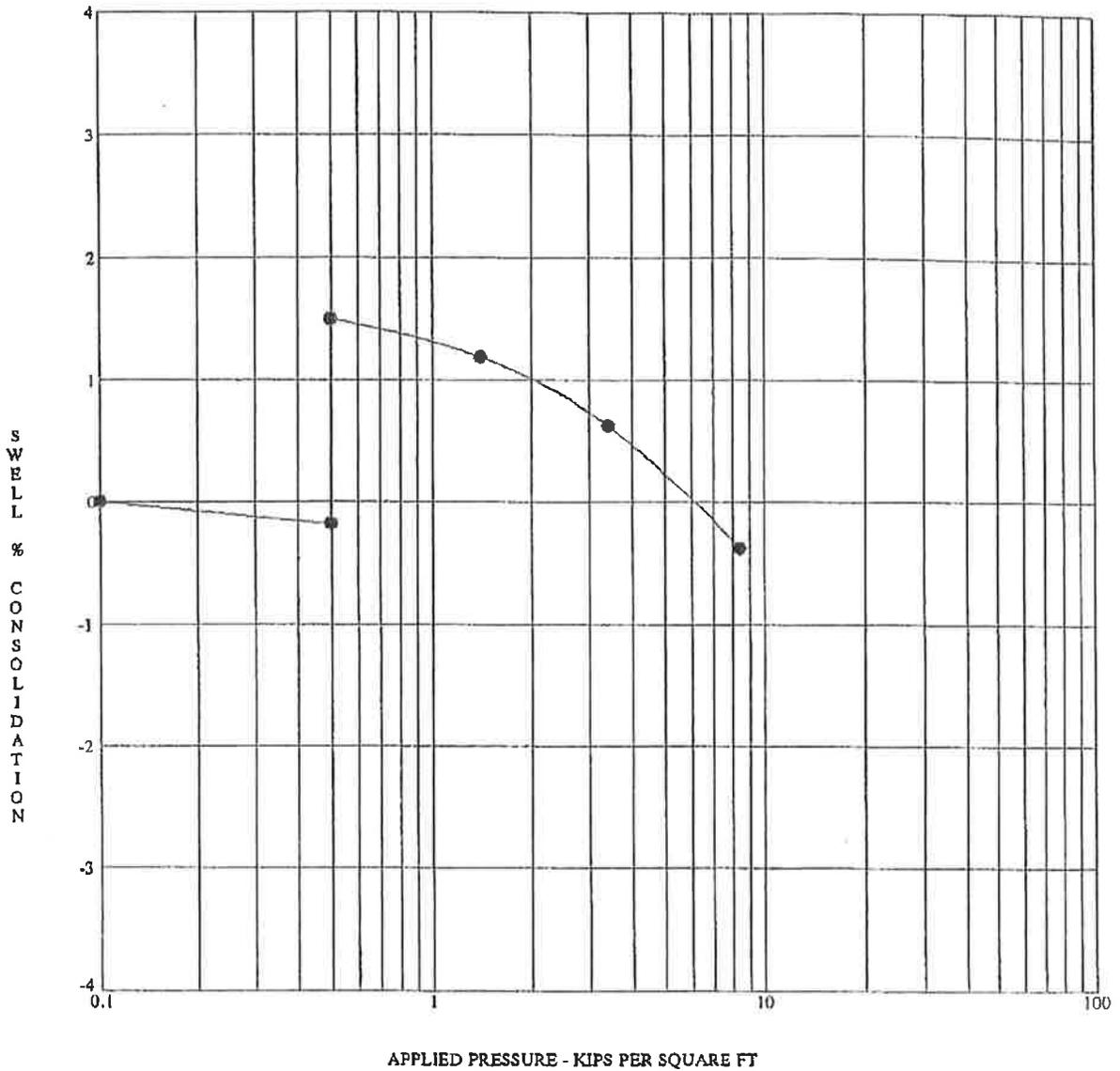
PROJECT	Proposed Industrial Development - NW Corner of State HWY 7 & WCR 3	JOB NO.	22975061
		DATE	5/23/97
SWELL/CONSOLIDATION TEST Terracon Consultants Western, Inc. Empire Division			



Specimen Identification	Classification	DD	MC%
● TB-9 2.0	Clayey Sand; very silty (SC)	95	6

PROJECT Proposed Industrial Development - NW Corner JOB NO. 22975061
of State HWY 7 & WCR 3 DATE 5/23/97

SWELL/CONSOLIDATION TEST
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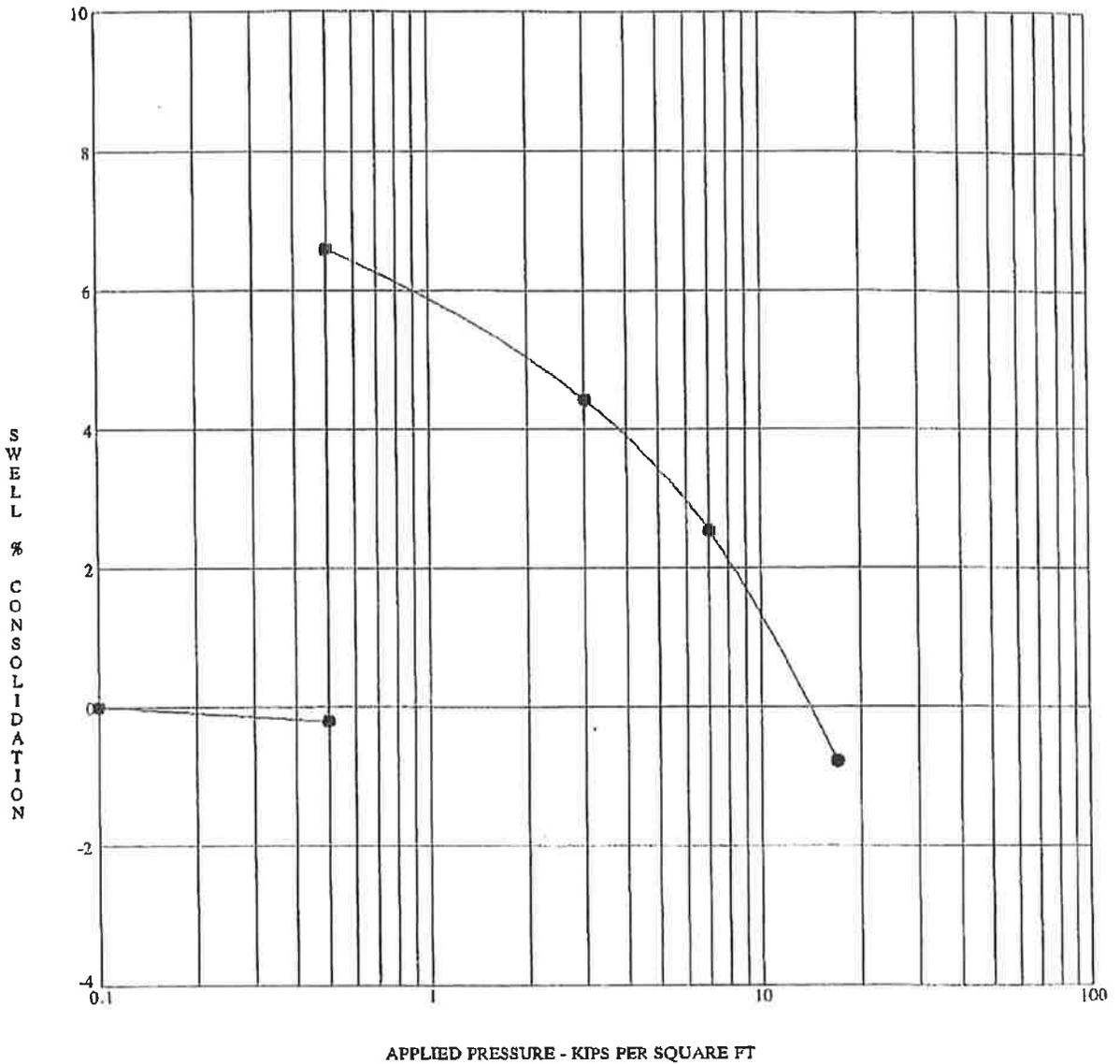


Specimen Identification		Classification	DD	MC%
●	TB-11 8.0	Claystone; sandy and silty	115	13

PROJECT **Proposed Industrial Development - NW Corner**
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DATE **5/23/97**

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Specimen Identification	Classification	DD	MC %
● TB-12 7.0	Claystone; high plasticity	116	16

PROJECT Proposed Industrial Development - NW Corner JOB NO. 22975061
of State HWY 7 & WCR 3 DATE 5/23/97

SWELL/CONSOLIDATION TEST
Terracon Consultants Western, Inc.
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APPENDIX B

DRILLING AND EXPLORATION

DRILLING & SAMPLING SYMBOLS:

SS : Split Spoon - 1½" I.D., 2" O.D., unless otherwise noted
 ST : Thin-Walled Tube - 2.6" I.D., unless otherwise noted
 RB : Ring Barrel Sampler - 2.42" I.D., 3" O.D. unless otherwise noted
 PA : Power Auger
 HA : Hand Auger
 CB : California Barrell - 1.94" I.D., 2.5" O.D.
 AS : Auger Sample
 HS : Hollow Stem Auger

PS : Piston Sample
 WS : Wash Sample
 RB : Rock Bit
 BS : Bulk Sample
 PM : Pressure Meter
 DC : Dutch Cone
 WB : Wash Bore

Penetration Test: Blows per foot of a 140 pound hammer falling 30 inches on a 2-inch O.D. split spoon, except where noted.

WATER LEVEL MEASUREMENT SYMBOLS:

WL : Water Level
 WCI : Wet Cave in
 DCI : Dry Cave in
 AB : After Boring

WS : While Sampling
 WD : While Drilling
 BCR : Before Casing Removal
 ACR : After Casting Removal

Water levels indicated on the boring logs are the levels measured in the borings at the time indicated. In pervious soils, the indicated levels may reflect the location of groundwater. In low permeability soils, the accurate determination of groundwater levels is not possible with only short term observations.

DESCRIPTIVE SOIL CLASSIFICATION

Soil Classification is based on the Unified Soil Classification system and the ASTM Designations D-2487 and D-2488. Coarse Grained Soils have more than 50% of their dry weight retained on a #200 sieve; they are described as: boulders, cobbles, gravel or sand. Fine Grained Soils have less than 50% of their dry weight retained on a #200 sieve; they are described as: clays, if they are plastic, and silts if they are slightly plastic or non-plastic. Major constituents may be added as modifiers and minor constituents may be added according to the relative proportions based on grain size. In addition to gradation, coarse grained soils are defined on the basis of their relative in-place density and fine grained soils on the basis of their consistency. Example: Lean clay with sand, trace gravel, stiff (CL); silty sand, trace gravel, medium dense (SM).

CONSISTENCY OF FINE-GRAINED SOILS

Unconfined Compressive Strength, Qu, psf	Consistency
< 500	Very Soft
500 - 1,000	Soft
1,001 - 2,000	Medium
2,001 - 4,000	Stiff
4,001 - 8,000	Very Stiff
8,001 - 16,000	Very Hard

RELATIVE DENSITY OF COARSE-GRAINED SOILS:

N-Blows/ft	Relative Density
0-3	Very Loose
4-9	Loose
10-29	Medium Dense
30-49	Dense
50-80	Very Dense
80 +	Extremely Dense

PHYSICAL PROPERTIES OF BEDROCK

DEGREE OF WEATHERING:

Slight Slight decomposition of parent material on joints. May be color change.

Moderate Some decomposition and color change throughout.

High Rock highly decomposed, may be extremely broken.

HARDNESS AND DEGREE OF CEMENTATION:

Limestone and Dolomite:

Hard Difficult to scratch with knife.

Moderately Can be scratched easily with knife,

Hard Cannot be scratched with fingernail.

Soft Can be scratched with fingernail.

Shale, Siltstone and Claystone:

Hard Can be scratched easily with knife, cannot be scratched with fingernail.

Moderately Can be scratched with fingernail.

Hard Can be easily dented but not molded with fingers.

Soft Can be easily dented but not molded with fingers.

Sandstone and Conglomerate:

Well Cemented Capable of scratching a knife blade.

Cemented Can be scratched with knife.

Poorly Cemented Can be broken apart easily with fingers.

Terracon

UNIFIED SOIL CLASSIFICATION SYSTEM

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests ^a				Soil Classification		
				Group Symbol	Group Name ^b	
Coarse-Grained Soils more than 50% retained on No. 200 sieve	Gravels more than 50% of coarse fraction retained on No. 4 sieve	Clean Gravels Less than 5% fines ^c	$Cu \geq 4$ and $1 \leq Cc \leq 3^e$	GW	Well-graded gravel ^f	
			$Cu < 4$ and/or $1 > Cc > 3^e$	GP	Poorly graded gravel ^f	
		Gravels with Fines more than 12% fines ^c	Fines classify as ML or MH	GM	Silty gravel,G,H	
	Fines classify as CL or CH		GC	Clayey gravel ^{g,h,i}		
	Sands 50% or more of coarse fraction passes No. 4 sieve	Clean Sands Less than 5% fines ^e	$Cu \geq 6$ and $1 \leq Cc \leq 3^e$	SW	Well-graded sand ^l	
			$Cu < 6$ and/or $1 > Cc > 3^e$	SP	Poorly graded sand ^l	
Sands with Fines more than 12% fines ^p		Fines classify as ML or MH	SM	Silty sand ^{q,r}		
		Fines Classify as CL or CH	SC	Clayey sand ^{q,r,i}		
Fine-Grained Soils 50% or more passes the No. 200 sieve	Silt and Clays Liquid limit less than 50	inorganic	$PI > 7$ and plots on or above "A" line ^j	CL	Lean clay ^{k,l,m}	
			$PI < 4$ or plots below "A" line ^j	ML	Silt ^{k,l,m}	
		organic	Liquid limit - oven dried	< 0.75	OL	Organic clay ^{k,l,m,n}
			Liquid limit - not dried		OH	Organic silt ^{k,l,m,o}
			Silt and Clays Liquid limit 50 or more	inorganic	PI plots on or above "A" line	CH
	PI lts below "A" line	MH			Elastic Silt ^{k,l,m}	
	organic	Liquid limit - oven dried	< 0.75	OH	Organic clay ^{k,l,m,p}	
		Liquid limit - not dried		OH	Organic silt ^{k,l,m,o}	
		Highly organic soils	Primarily organic matter, dark in color, and organic odor	PT	Peat	

^aBased on the material passing the 3-in. (75-mm) sieve

^bIf field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.

^cGravels with 5 to 12% fines require dual symbols:

GW-GM well-graded gravel with silt
 GW-GC well-graded gravel with clay
 GP-GM poorly graded gravel with silt
 GP-GC poorly graded gravel with clay

^dSands with 5 to 12% fines require dual symbols:

SW-SM well-graded sand with silt
 SW-SC well-graded sand with clay
 SP-SM poorly graded sand with silt
 SP-SC poorly graded sand with clay

$$e \text{ } Cu = D_{60} / D_{10} \quad Cc = \frac{(D_{30})^2}{D_{10} \times D_{60}}$$

^fIf soil contains $\geq 15\%$ sand, add "with sand" to group name.

^gIf fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.

^hIf fines are organic, add "with organic fines" to group name.

ⁱIf soil contains $\geq 15\%$ gravel, add "with gravel" to group name.

^jIf Atterberg limits plot in shaded area, soil is a CL-ML, silty clay.

^kIf soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel", whichever is predominant.

^lIf soil contains $\geq 30\%$ plus No. 200 predominantly sand, add "sandy" to group name.

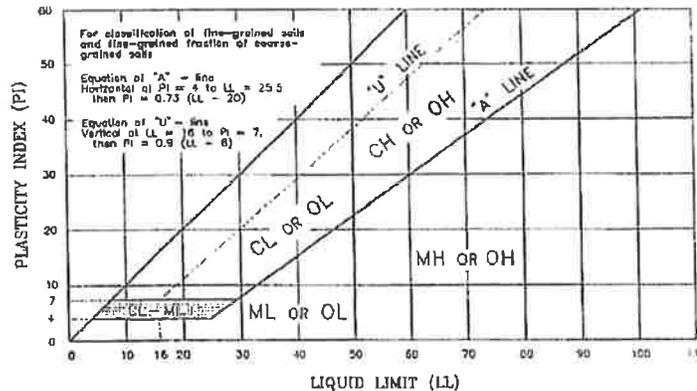
^mIf soil contains $\geq 30\%$ plus No. 200, predominantly gravel, add "gravelly" to group name.

ⁿ $PI \geq 4$ and plots on or above "A" line.

^o $PI < 4$ or plots below "A" line.

^p PI plots on or above "A" line.

^q PI plots below "A" line.



Terracon

ROCK CLASSIFICATION

(Based on ASTM C-294)

Sedimentary Rocks

Sedimentary rocks are stratified materials laid down by water or wind. The sediments may be composed of particles of pre-existing rocks derived by mechanical weathering, evaporation or by chemical or organic origin. The sediments are usually indurated by cementation or compaction.

Chert	Very fine-grained siliceous rock composed of micro-crystalline or crypto-crystalline quartz, chalcedony or opal. Chert is various colored, porous to dense, hard and has a conchoidal to splintery fracture.
Claystone	Fine-grained rock composed of or derived by erosion of silts and clays or any rock containing clay. Soft massive; gray, black, brown, reddish or green and may contain carbonate minerals.
Conglomerate	Rock consisting of a considerable amount of rounded gravel, sand and cobbles with or without interstitial or cementing material. The cementing or interstitial material may be quartz, opal, calcite, dolomite, clay, iron oxides or other materials.
Dolomite	A fine-grained carbonate rock consisting of the mineral dolomite [CaMg (CO ₃) ₂]. May contain noncarbonate impurities such as quartz, chert, clay minerals, organic matter, gypsum and sulfides. Reacts with hydrochloric acid (HCL).
Limestone	A fine-grained carbonate rock consisting of the mineral calcite (CaCO ₃). May contain noncarbonate impurities such as quartz, chert, clay minerals, organic matter, gypsum and sulfides. Reacts with hydrochloric acid (HCL).
Sandstone	Rock consisting of particles of sand with or without interstitial and cementing materials. The cementing or interstitial material may be quartz, opal, calcite, dolomite, clay, iron oxides or other material.
Shale	Fine-grained rock composed of, or derived by erosion of silts and clays or any rock containing clay. Shale is hard, platy, or fissile may be gray, black, reddish or green and may contain some carbonate minerals (calcareous shale).
Siltstone	Fine grained rock composed of, or derived by erosion of silts or rock containing silt. Siltstones consist predominantly of silt sized particles (0.0625 to 0.002 mm in diameter) and are intermediate rocks between claystones and sandstones, may be gray, black, brown, reddish or green and may contain carbonate minerals.

Sierra Vista Rezoning January 2008

Phase I Environmental Report





Kumar & Associates, Inc.
Geotechnical and Materials Engineers
and Environmental Scientists



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**PHASE I
ENVIRONMENTAL SITE ASSESSMENT
UNDEVELOPED PROPERTY
NORTHWEST CORNER OF
STATE HIGHWAY 7 AND WELD COUNTY ROAD 3
ERIE, COLORADO**

Prepared by:

Jeffrey R. Martin
Project Geologist

Reviewed by:

Donald R. Ganser, P.G.
Senior Project Manager

Prepared for:

**ERIE INVESTORS, LLC.
6860 SOUTH YOSEMITE STREET
CENTENNIAL, COLORADO 80112**

ATTENTION: Mr. Lee Davidson

Project No. 07-1-517

October 23, 2007



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SUMMARY

Kumar & Associates, Inc. (K+A) has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of the American Society of Testing and Materials (ASTM) Practice E 1527-05 for the approximately 60-acre undeveloped property located at the northwest corner of the intersection of Colorado State Highway 7 (SH 7) and Weld County Road 3 (WCR 3), which is also known as Bonanza Drive southeast of Erie, Weld County, Colorado; the "subject site." Any exceptions to, or deletions from, this practice are described in Section 1.0 of this report.

The subject site is currently undeveloped. Review of historical resources dating to 1951 indicates the subject site had been utilized previously for crop cultivation. Residential development, the predominant utilization of the subject site vicinity, first appeared circa 1984.

According to data available via the Weld County website, the subject site is currently owned by Colorado Investment Group, LLC. At the time of the site reconnaissance, the subject site appeared as largely undeveloped grassland. No recognized environmental conditions were observed or noted associated with the subject site.

Properties northern and southern adjacent to the subject site appeared residentially developed during the site reconnaissance. The western adjacent properties appeared as a wide drainage. The eastern adjacent properties appeared residentially and commercially developed.

The review of regulatory databases revealed one (1) property located within the ASTM-specified search radii in one (1) of the 20 databases searched. None of the database sites are anticipated to impact the subject site. The subject site was not listed in any of the queried databases.

This assessment has not revealed any recognized environmental conditions associated with the subject site. Further investigation of the environmental quality of the subject site does not currently appear warranted.

1.0 INTRODUCTION

This report presents the results of the Phase I Environmental Site Assessment (ESA) conducted by Kumar & Associates, Inc. (K+A) of the approximately 60-acre undeveloped property located at the northwest corner of the intersection of Colorado State Highway 7 (SH 7) and Weld County Road 3 (WCR 3), which is also known as Bonanza Drive southeast of Erie, Weld County, Colorado. A site location map and a summary of site observations are shown on Figures 1 and 2, respectively. A bibliography of the sources used to prepare this report is presented in Appendix A.

The Phase I ESA was performed in general accordance with American Society of Testing and Materials (ASTM) E 1527-05, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process." The purpose of the assessment was to identify potential recognized environmental conditions in connection with the site and to satisfy one of the requirements to qualify for the innocent landowner defense to Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) liability. Recognized environmental conditions, as defined in ASTM E 1527-05, means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the site or into the ground, ground water, or surface water of the site.

The only exceptions to this practice are:

1. The previous subject site owner(s) was/were not interviewed, as they were unable to be located.
2. The subject site history was not determined dating to 1940, as appropriate resources were not readily available.

These exceptions do not appear sufficiently significant to adversely impact the conclusions presented herein or the validity of this report.

The assessment was also performed in accordance with K+A Proposal No. P-07-566 dated September 25, 2007, and executed by Mr. Tom Davidson of Erie Investors, LLC. on September 26, 2007.

2.0 SITE DATA

2.1 Site Description

The subject site consists of approximately 60-acres of undeveloped land located in the southern approximately three-eighths ($S\frac{3}{8}$) of the southeast quarter ($SE\frac{1}{4}$) of Section 31, Township 1 North, Range 68 West ($S31/T1N/R68W$) of the 6th Principal Meridian in Weld County, Colorado. It is located at the northwest corner of the intersection of SH 7 and WCR 3. The subject site consists of a single parcel of land identified on the Weld County tax parcel maps as Parcel No. 146731000031. According to county data, the parcel is currently owned by Colorado Investment Group, LLC. The legal description, as excerpted from the county assessor's records, is included as a portion of Appendix A.

Based on the USGS Erie, Colorado 7.5-minute topographic quadrangle, dated 1967 and revised 1980, the subject site has an average surface elevation of approximately 5260 feet above mean sea level with approximately 80 feet of relief. The site appears to be centrally crowned so that the site slopes gently to steeply in all directions. Regionally, topography slopes in a northwestern direction toward Coal Creek. Generally, ground-water flow direction mimics the surface topography; therefore, ground water is assumed to flow northwesterly beneath the site. It should be noted that ground-water flow direction is influenced by factors such as underground structures, seasonal fluctuations, and soil and bedrock properties; and, the only method to reliably determine ground-water flow direction involves its intrusive measurement, which is outside the scope of any Phase I ESA.

The nearest water body is a small, unnamed tributary to Coal Creek that flows northwest through the southwest corner of the subject site. Coal Creek flows northerly approximately 1/2 -mile northwest of the subject site. Digital recognized wetlands data is not available via the U.S. Army Corps of Engineer's National Wetlands Inventory (NWI) website; evidence suggestive of wetlands, consisting of flora typical of wetlands, was observed during the site reconnaissance at the extreme southwest corner of the subject site where the unnamed stream transects it. FEMA Flood Insurance Rate Map 080266 0970 D, dated September 28, 1990, indicates the subject site to be located outside a 500-year floodplain.

According to an on-line U.S. Department of Agriculture's (USDA's) National Resource Conservation Services (NRCS) source, the soil at the subject site likely consists of the Heldt silty clay, the Midway-Shingle complex, and the Ulm clay loam. The Midway-Shingle Complex consists of clay and clay loam. By definition, a *loam* consists of 7% to 27% clay, 28% to 50% silt, and 23% to 52% sand with

some proportion of organic matter. A clay loam has a greater proportion of clay and reduced proportions of the other components. Additionally, the NRCS data indicates that the Heldt, Midway, and Ulm soils may contain expansive (swelling) clays. According to the 1979 Geologic Map of Colorado, the underlying geology at the subject site is Cretaceous (age) Laramie Formation and Fox Hills Sandstone. The Laramie Formation consists of clay, mudstone, coal, and sandstone. The sandstone was exposed in an outcrop at the northern adjacent residential properties.

Adjacent and vicinity properties were predominantly residential with limited commercial development. The Tri-County Airport is northwest of the subject site.

2.2 Site History

K+A personnel conducted a review of historic aerial photography, historic topographic maps, historic Sanborn Fire Insurance Maps, and municipal data to determine the history of the subject site dating to 1938. Aerial photographs from the years 1966, 1974, 1979, 1984, 1991, 1995, 2000, and 2005 were reviewed, and the data is summarized in Table I. Historical USGS topographic maps dated 1951; 1967; and 1967, revised 1980; were also reviewed. The 1951 topographic map is based on data collected in 1948. A search of Denver Public Library's Sanborn Fire Insurance Map collection revealed that Sanborn Fire Insurance Maps were not available for the subject site area.

According to all of the available historical resources, it appeared that the subject site had been either utilized agriculturally for crop cultivation or was undeveloped since at least 1948, the date of the earliest available historical data. At the time of the site reconnaissance the subject site remained undeveloped. The Tri-County Airport was first present northwest of the subject site in the 1979 aerial photograph, and residential development, the predominant utilization of the subject site vicinity, first appeared circa 1984.

2.3 Site Visit

On September 28, 2007, Mr. Jeffrey Martin, K+A Project Geologist, performed a site reconnaissance of the subject site and observed adjacent and vicinity sites from property boundaries. The weather at the time of the site visit was overcast with mid-80 degree Fahrenheit (80°F) temperatures. Mr. Martin was unescorted during the site reconnaissance. A summary of the site observations is presented on Figure 2, and selected photographs taken at the time of the visit are presented on Figures 3 through 5. A summary of observed items/conditions with the potential to be considered recognized environmental conditions is presented in Table II. No recognized environmental conditions were noted.

The subject site is defined by SH 7 to the south, and WCR 3 defines the subject site to the east. A broad drainage roughly defines the western extent of the subject site and residential properties approximate the northerly subject site limit. At the time of the site reconnaissance, the subject site appeared as largely undeveloped grassland.

A large mound of soil is located near the northeast corner of the subject site and within its bounds. ASTM E 1527-05 explicitly states that fill materials from an unknown source constitute solid waste. However, the mound of soil is the result of the 1999 re-alignment and re-grading of WCR 3, according to a previous Phase I ESA Report for the subject site. Additionally, no evidence of detrimental environmental impact; such as staining, odors, or stressed vegetation; was observed associated with the mound of soil. Thus, the mound of soil does not constitute a recognized environmental condition. Limited quantities of solid waste were observed distributed very sparsely across the subject site. These items of solid waste included wood scrap, corrugated sheet metal, a top of a fiberglass car body, and a few liquid containers similar to approximately two-gallon (2-gal.) gasoline cans. No evidence of impact was observed associated with the solid waste. Due to the negligible observed quantities of waste and a lack of evidence of impact, the limited quantity solid waste litter does not constitute a recognized environmental condition.

The development observed at the properties adjacent consists of residences to the north and south, beyond SH 7; a broad undeveloped drainage to the west; and residential and commercial development to the east, beyond WCR 3. Vicinity development consists of a similar mix and includes the Tri-County Airport northwest of the subject site.

2.4 Interviews

K+A personnel interviewed Mr. Tom Davidson via questionnaire. Mr. Davidson is a representative of the current subject site owner and the Phase I ESA User. Mr. Davidson has been associated with the subject site for approximately one (1) year. He did not provide any information indicative of any recognized environmental conditions for the subject site. He did indicate that a search for environmental liens filed against or recorded for the subject site was performed, and it did not reveal any liens for the site. Additionally, Mr. Davidson indicated that he is unaware of any activity and use limitations (AULs).

3.0 AGENCY REVIEW

Government agency records were reviewed concerning potential usage, storage, treatment, and disposal of hazardous waste and petroleum products at and near the subject site, or spills or incidents involving hazardous substances or petroleum products that may have resulted in recognized environmental conditions in connection with the subject site. The database review was conducted in general accordance with the current ASTM standard for Phase I ESAs. A copy of the federal and state agency records review, prepared by Satisfi Environmental Information, is included in Appendix C. Documentation of the records reviewed by Satisfi and a description of the following Federal and State environmental regulatory programs is included in their report. The local health and fire departments were also contacted for this assessment.

3.1 Federal Agencies

No National Priorities List (NPL) sites were identified within a 1.0-mile radius of the subject property.

No facilities regulated by the Resource Conservation and Recovery Act (RCRA) and subject to Corrective Action (CORRACT) were identified within a 1.0-mile radius of the subject property.

No Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) sites were identified within a 0.5-mile radius of the subject property.

No CERCLIS No Further Remedial Action Planned (NFRAP) sites were identified within a 0.5-mile radius of the subject property.

The subject site was not listed in the Resource Conservation and Recovery Information System (RCRIS) database. No RCRA Generators were identified adjacent to the subject site.

The subject site was not listed on the Emergency Response Notification System (ERNS) database.

3.2 State Agencies

No State Voluntary Cleanup (VCUP) sites were identified within a 1.0-mile radius of the subject site.

There is no state equivalent to the federal CERCLIS, for Colorado. The federal NPL is a derivative of the federal CERCLIS database. Since Colorado does not maintain a state CERCLIS equivalent, there is also no state equivalent for the federal NPL.

No State Solid Waste Landfill (SWL) sites were identified within a 0.5-mile radius of the subject site. Six (6) SWL sites were listed as orphan sites. Properties are included as orphan sites when the regulatory database record does not contain sufficient location information to map them and, thereby, determine if they are within the appropriate search radii. Additional information pertaining to the orphan SWL sites is available on pages 8 and 9 of the database report included as Appendix C.

One (1) Leaking Underground Storage Tank (LUST) site was identified within a 0.5-mile radius of the subject site. It is listed below.

LUST ADDRESS	STATUS	DISTANCE / DIRECTION FROM SITE
Tri-County Airport 395 Airport Drive	Closed	~ 0.23 miles Northwest

As the remedial efforts at the listed LUST site have been sufficient to satisfy the closure requirements established by the Colorado Department of Labor and Employment (CDLE), Division of Oil and Public Safety (OPS) and as the listed LUST site is located in an inferred hydrogeologically down gradient direction from the subject site, impact to the subject site subsurface attributable to the listed LUST site does not appear likely. Thus, activities and subsurface conditions at the Tri-County Airport do not appear to represent an off-site contaminant source for the subject site.

Storage tanks were not identified at or adjacent to the subject site.

K+A personnel also utilized on-line mapping applications provided by the Colorado Division of Water Resources and the Colorado Oil and Gas Conservation Commission to search for water wells and oil and gas wells at the subject site. No petroleum wells and/or associated equipment were revealed at the subject site. Based upon data obtained from the Colorado Division of Water Resources and on-site observations, no water wells are located within the subject site.

3.3 Local Agencies

K+A personnel also contacted the applicable fire and health departments inquiring as to any relevant records for the subject and/or adjacent properties. Ms. Luanne Penfold, Fire Marshal for the Mountain View Fire District, responded via telephone that the fire district does not have any pertinent records for the subject site. Ms. Silvia Garcia with the Weld County Department of Health responded similarly.

4.0 PREVIOUS REPORTING

Erie Investors, LLC. provided a previous Phase I ESA report for the subject site prepared by ERO Resources Corporation of Denver, Colorado, in 2002. That report concluded that the *assessment revealed no evidence of recognized environmental conditions in connection with the [subject site]. For this reason, ERO [recommended] no further action.*

5.0 FINDINGS AND OPINIONS

The subject site is currently undeveloped and appears to have been or to have been utilized agriculturally from the time of the earliest available historical resource; 1948. Tasks performed in completion of this ESA have not revealed the presence of recognized environmental conditions for the subject site. Further investigation currently does not appear warranted.

6.0 CONCLUSIONS

Kumar & Associates, Inc. has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM E 1527-05 for the approximately 60-acre undeveloped property located at the northwest corner of the intersection of SH 7 and WCR 3 southeast of Erie, Weld County, Colorado; the "subject site." Any exceptions to, or deletions from, this practice are described in Section 1.0 of this report.

This assessment has not revealed any recognized environmental conditions associated with the subject site. Further investigation of the environmental quality of the subject site does not currently appear warranted.

7.0 CERTIFICATION AND LIMITATIONS

We declare that, to the best of our professional knowledge and belief, Mr. Jeffrey Martin meets the definition of Environmental Professional as defined in 40 CFR 312.10. He has the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject site. He has developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

This environmental assessment has been performed in accordance with ASTM Standard Practice 1527-05 for the use of the client for evaluation purposes. The conclusions submitted in this report are based on the data obtained from the information reviewed, site observations and personal interviews. The materials reviewed and statements made by persons interviewed were relied upon

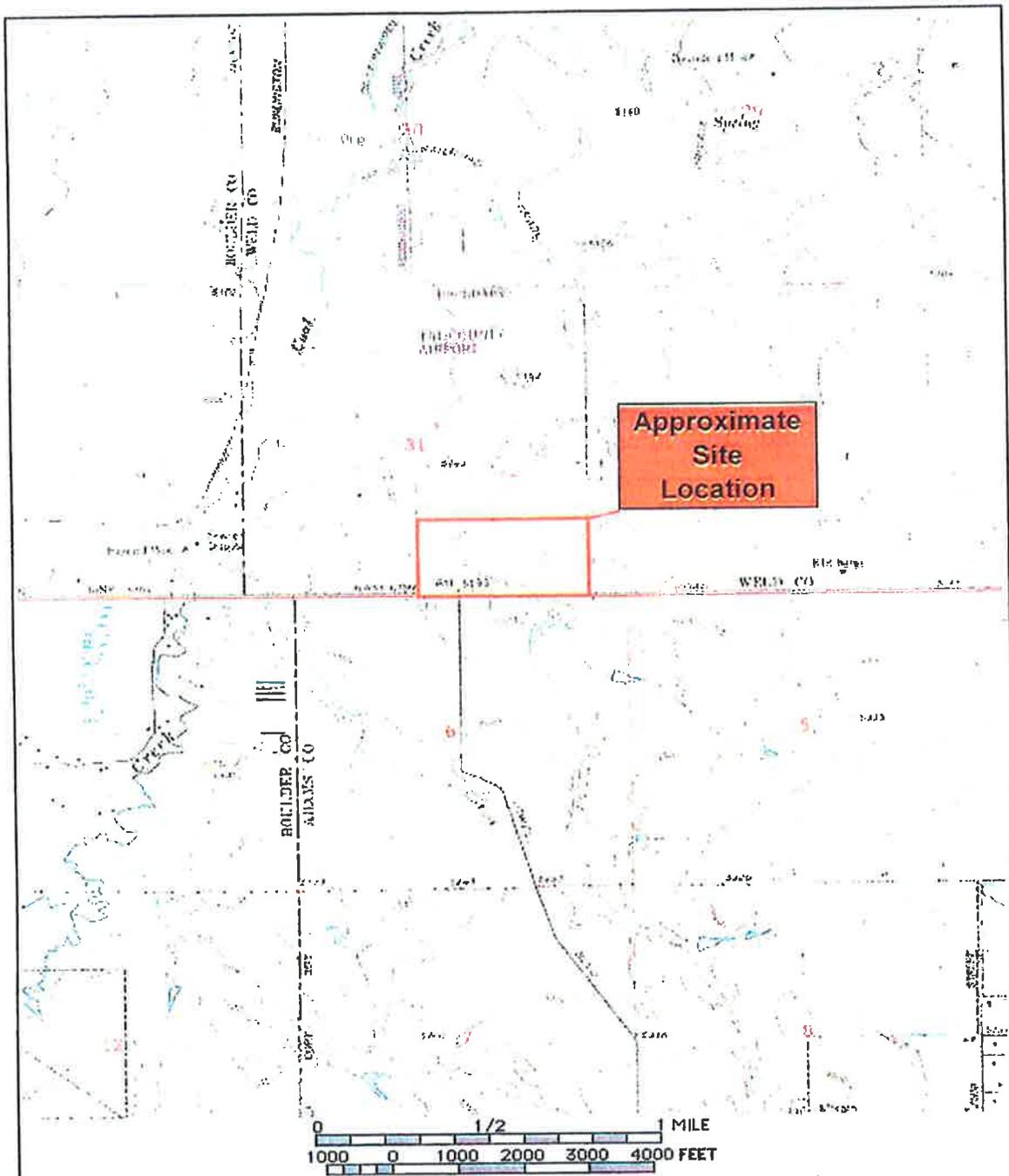
07-1-517 rpl/jm

to develop the conclusions. The nature and extent of any soil or ground water contamination at the site was not evaluated by obtaining samples and conducting laboratory analysis. It is possible that a sampling and analysis program or excavation of soil could change the conclusions presented in this report.

Client agrees that Kumar & Associates, Inc. has neither created nor contributed to the creation or existence of any possible hazardous substances or petroleum products at the site. Accordingly, the client hereby waives any claim, liability or defense caused for injury or loss sustained by any party from such exposure allegedly arising out of or related to our findings, conclusions, and recommendations.

JRM/mj

cc: book, file



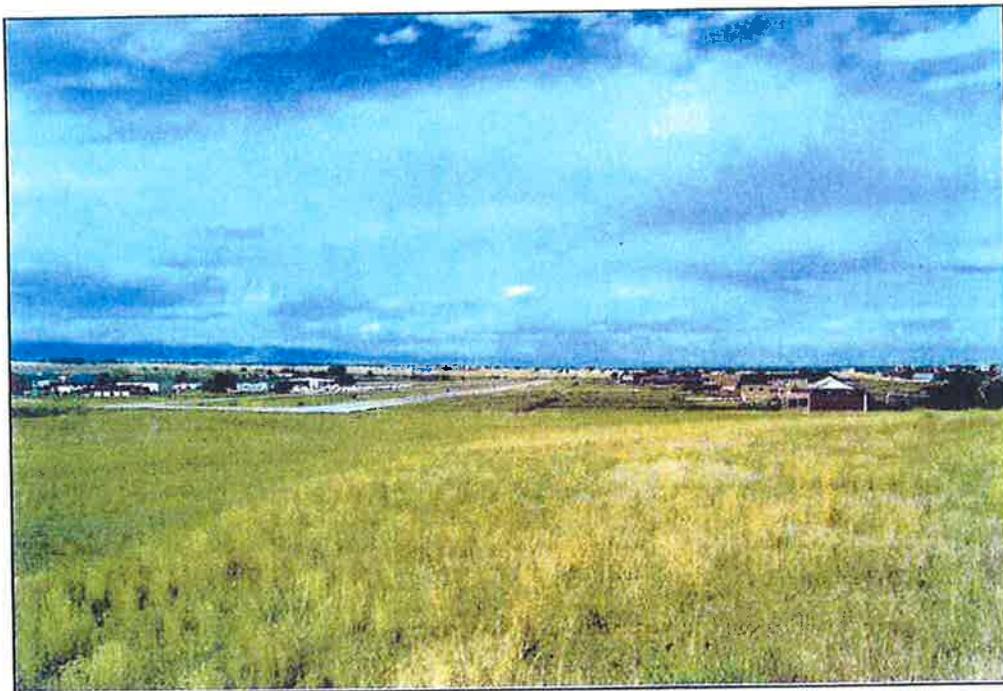
Printed from TOPO! ©1997 Wildflower Productions (www.topo.com)

USGS 7.5 Minute Erie, Colorado
Topographic Quadrangle Series
1967, revised 1980





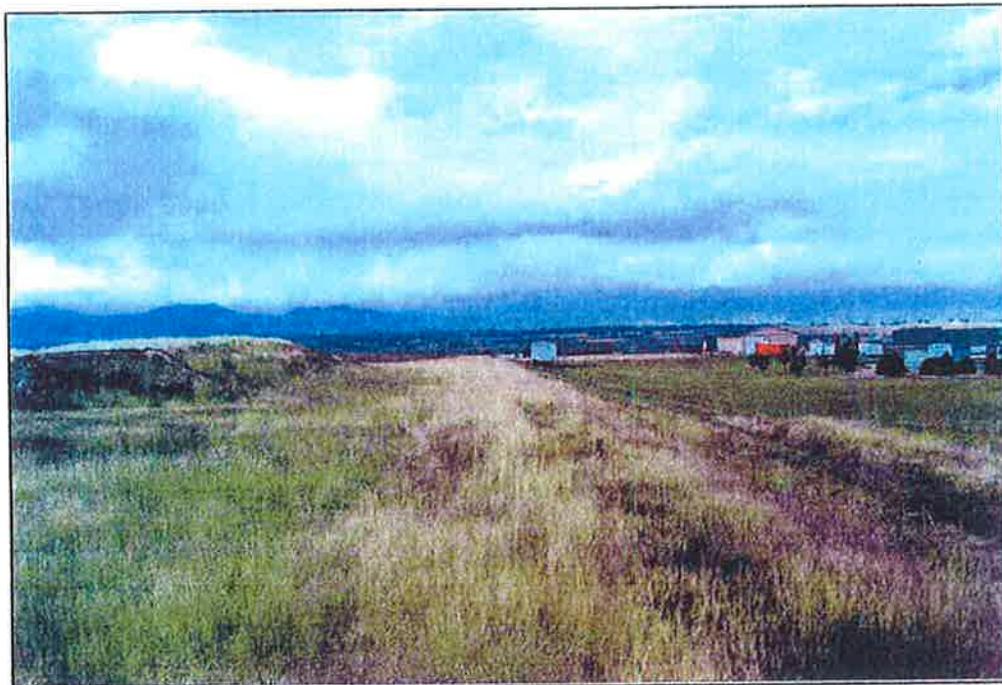
PHOTOGRAPH 1: SOUTHEASTERN VIEW OF A PORTION OF THE SUBJECT SITE; ITS UNDEVELOPED NATURE IS EVIDENT. THE INTERSECTION OF SH7 WITH WCR3 AND VICINITY RESIDENCES ARE VISIBLE.



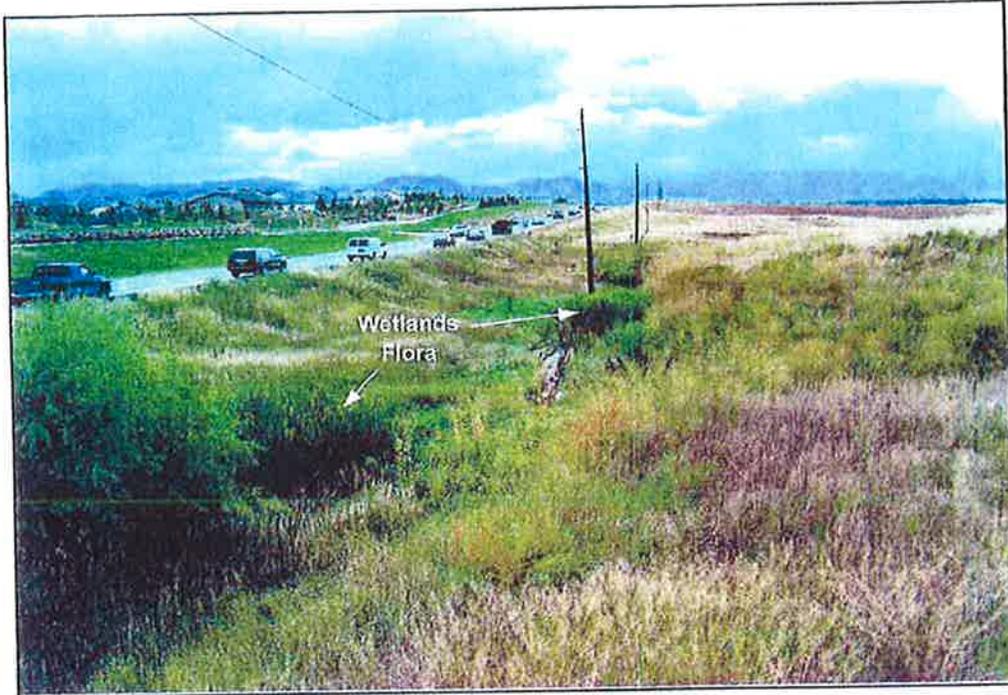
PHOTOGRAPH 2: NORTHWESTERN VIEW WHERE A NORTHERN ADJACENT RESIDENCE, THE NORTHWESTERN VICINITY TRI-COUNTY AIRPORT, AND THE WESTERN ADJACENT DRAINAGE ARE VISIBLE.



PHOTOGRAPH 3: EASTERN VIEW ALONG THE NORTHERN SITE LIMIT WHERE THE NORTHERN ADJACENT RESIDENTIAL PROPERTIES, THE UNDEVELOPED NATURE OF THE SUBJECT SITE, AND A MOUND OF SOIL ARE VISIBLE.



PHOTOGRAPH 4: WESTERN VIEW ALONG THE NORTHERN SITE BOUNDARY WHERE THE NORTHERN ADJACENT RESIDENCES AND A SIGNIFICANT MOUND OF SOIL (AS PICTURED IN PHOTOGRAPH No.3) ARE VISIBLE.



PHOTOGRAPH 5: SOUTHWESTERN VIEW OF THE DRAINAGE AT THE SOUTHWESTERN EXTENT OF THE SUBJECT SITE. PLANT-LIFE TYPICALLY ASSOCIATED WITH WETLANDS ARE VISIBLE.



PHOTOGRAPH 6: VIEW OF AN UNLABELED LIQUIDS CONTAINER, TYPICAL OF A GASOLINE CONTAINER, WHICH IS CONSIDERED A PORTION OF THE LIMITED SOLID WASTE OBSERVED AT THE SUBJECT SITE.

TABLE I
SUMMARY OF AERIAL PHOTOGRAPH REVIEW
PROJECT NO.: 07-1-517

DATE	OBSERVATION
04-15-1966	The subject site appeared agriculturally developed as evidenced by crop rows. Weld County Road 3 (WCR 3) was visible along the eastern margin of the subject site and (Colorado) State Highway 7 (SH 7) was visible along the southern limit of the subject site. An unnamed stream valley was apparent transecting the southwest corner of the subject site. The stream was dammed south of the site. Multiple structures were apparent north, northeast, northwest, and south of the subject site. These structures appeared to be residences and/or agricultural outbuildings.
04-27-1974	Development of the subject site, adjacent properties, and surrounding vicinity appeared to have remained relatively static.
05-12-1979	An airport appeared to have been developed northwest of the subject site. A petroleum production well potentially was located at the northern adjacent property. Otherwise, development of the subject site, adjacent properties, and surrounding vicinity appeared to have remained relatively static.
11-18-1984	Residential development of the northern adjacent property was visible; otherwise, development of the subject site, adjacent properties, and surrounding vicinity appeared to have remained relatively static.
09-24-1991	Expansion of the northern adjacent residential development was visible, as was initial commercial development of the eastern adjacent site(s). Otherwise, development of the subject site, adjacent properties, and surrounding vicinity appeared to have remained relatively static.
06-26-1995	Development of the subject site, adjacent properties, and surrounding vicinity appeared to have remained relatively static.
05-05-2000	The portion of WCR 3 immediately north of SH 7 was re-aligned to the west, effectively reducing the area of the property comprising the subject site. Otherwise, development of the subject site, adjacent properties, and surrounding vicinity appeared to have remained relatively static.
06-06-2005	The northern adjacent residential development continued to expand and the southern adjacent site beyond SH 7 appeared to have been graded in preparation of development/construction. Otherwise, development of the subject site, adjacent properties, and surrounding vicinity appeared to have remained relatively static.

TABLE II
 SUBJECT PROPERTY RECONNAISSANCE
 USES AND CONDITIONS
 PROJECT NO.: 07-1-517

Observation ¹	Reported		Observed		Recognized Environmental Condition ¹		
	Yes	No	Yes	No	No	De Minimis	Significant
	Current Use(s) of the Property		X	X		X	
Past Use(s) of the Property	X			X	X		
Hazardous Substances and Petroleum Products ²		X		X	X		
Storage Tanks		X		X	X		
Odors		X		X	X		
Pools of Liquid		X		X	X		
Drums		X		X	X		
Hazardous Substances and Petroleum Products Containers ³		X		X	X		
Unidentified Substance Containers		X	X		X		
Polychlorinated Biphenyls (PCBs) ⁴		X		X	X		
Heating / Cooling		X		X	X		
Stains or Corrosion		X		X	X		
Drains and Sumps		X		X	X		
Pits, Ponds, or Lagoons		X		X	X		
Stained Soil or Pavement		X		X	X		
Stressed Vegetation		X		X	X		
Solid Waste		X	X		X		
Waste Water		X		X	X		
Wells		X		X	X		
Septic Systems		X		X	X		

1. As excerpted from ASTM E 1527-05, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, pages 17 and 18.
2. In connection with identified uses.
3. Not necessarily in connection with identified uses.
4. Containing equipment

DOCUMENTATION

Aerial Photographs

Colorado Aerial Photograph Service, Denver, Colorado; 1966, 1974, 1979, 1984, 1991, 1995, 2000, and 2005.

Topographic Maps

Erie, Colorado, 7.5-minute Quadrangle Topographic Series for the years 1951; 1967; and 1967, revised 1980.

Sanborn Fire Insurance Maps

Denver Central Public Library, Denver, Colorado, on-line research database, <http://sanborn.umi.com/co/0990/dateid-000001.htm?CCSI=2555n>.

Soil Data

National Resource Conservation Service, US Department of Agriculture; Web Soil Survey: <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>.

Geology Data

Geologic Map of Colorado, US Geologic Survey, US Department of the Interior, Ogden Tweto, 1979.

Wetlands Data

National Wetlands Inventory, US Army Corps of Engineers, On-line Wetlands Mapper: <http://wetlandsfws.er.usgs.gov/wtlnds/launch.html>.

Floodplain Data

Federal Emergency Management Administration, US Department of Homeland Security, on-line Flood Insurance Rate Map 080266 0970 D, dated September 28, 1990.

Oil and Gas Well Data

Colorado Oil and Gas Conservation Commission On-line Database: <http://oil-gas.state.co.us/>.

Water Well Data

Colorado Division of Water Resources On-line Mapping Application: <http://165.127.23.116/website/lttools/index.asp?iw=800&ih=600>.

Federal and State Database Review

Satisfi Environmental Information, Centennial, Colorado.

Local Agency Review

Weld County Assessor's website.

Tri-County Health Department, Greenwood Village, Colorado.

Mountain View Fire District, Longmont, Colorado.

Interviews

Tom Davidson, Manager, Erie Investors, I.L.C. as a representative of the current subject site owner and as the Phase I ESA Report User.

Reviewed Previous Reporting

Phase I Environmental Assessment Pratt Property CO Highway 7 and Weld County Road 3 Erie, Colorado, ERO Resources Corporation, April 2, 2002.

Legal Description

Parcel No. 146731000031

(As excerpted from the Weld County Assessor's Website)

25005 S2SE4 31 1 68 EXC COMM S4 COR OF SEC THENCE N0D46'E
75' TO TRUE POB CONT N0D46'E 1245.57' TO NW COR OF S2SE4
S89D35'E 60' THENCE S12D19'E 1277' TO A PT ON N RW LN OF
STATE HWY #7 THENCE N89D34'W 349.38' TO TRUE POB EXC BEG
S4 COR SEC N0D46'E



Kumar & Associates, Inc.
Geotechnical and Materials Engineers
and Environmental Scientists



2390 South Lipan Street
Denver, CO 80223
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Other Office Locations: Colorado Springs, Fort Collins, Pueblo
and Winter Park/Fraser, Colorado

September 27, 2007

Ms. Luanne Penfold
Fire Marshall
Mountain View Fire District
Via E-Mail: lpenfold@mountainviewfire.org

Subject: Search for Environmental Incidents
Parcel No. 146731000031
Northwest Corner of
State Highway 7 & Weld County Road 3
Southeast of Erie, Colorado

Project No.: 07-1-517

Ms. Penfold:

We are currently conducting a Phase I Environmental Site Assessment of the above-mentioned property. Please conduct a search for any environmental incidents, fires, hazardous materials incidents, and spills or responses to the subject site and/or immediately adjacent properties. If fees are required to perform a records search, please telephone me at 303/742-9700 so that payment arrangements may be made.

Thank you for your assistance.

Sincerely,

KUMAR & ASSOCIATES, INC.

Jeffrey R. Martin
Project Geologist

JRM
cc: file



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Weld County Health Department
Via Fax: 970/304-6412

Subject: Search for Environmental Incidents
Parcel No. 146731000031
Northwest Corner of
State Highway 7 & Weld County Road 3
Southeast of Erie, Colorado

Project No.: 07-1-517

To Whom It May Concern:

We are currently conducting a Phase I Environmental Site Assessment of the above-mentioned property. Please conduct a search for any environmental incidents, fires, hazardous materials incidents, and spills or responses to the subject site and/or immediately adjacent properties. If fees are required to perform a records search, please telephone me at 303/742-9700 so that payment arrangements may be made.

Thank you for your assistance.

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Environmental Database Search

Subject Property

**Undeveloped 60 Acre Property
NWC Hwy 7 & WCR 3
Erie, CO**

Latitude: 40.002301
Longitude: -105.041252

Performed For: Kumar & Associates, Inc
2390 S Lipan Street
Denver, CO 80223
Attn: Jeff Martin
Reference: 07-1-517

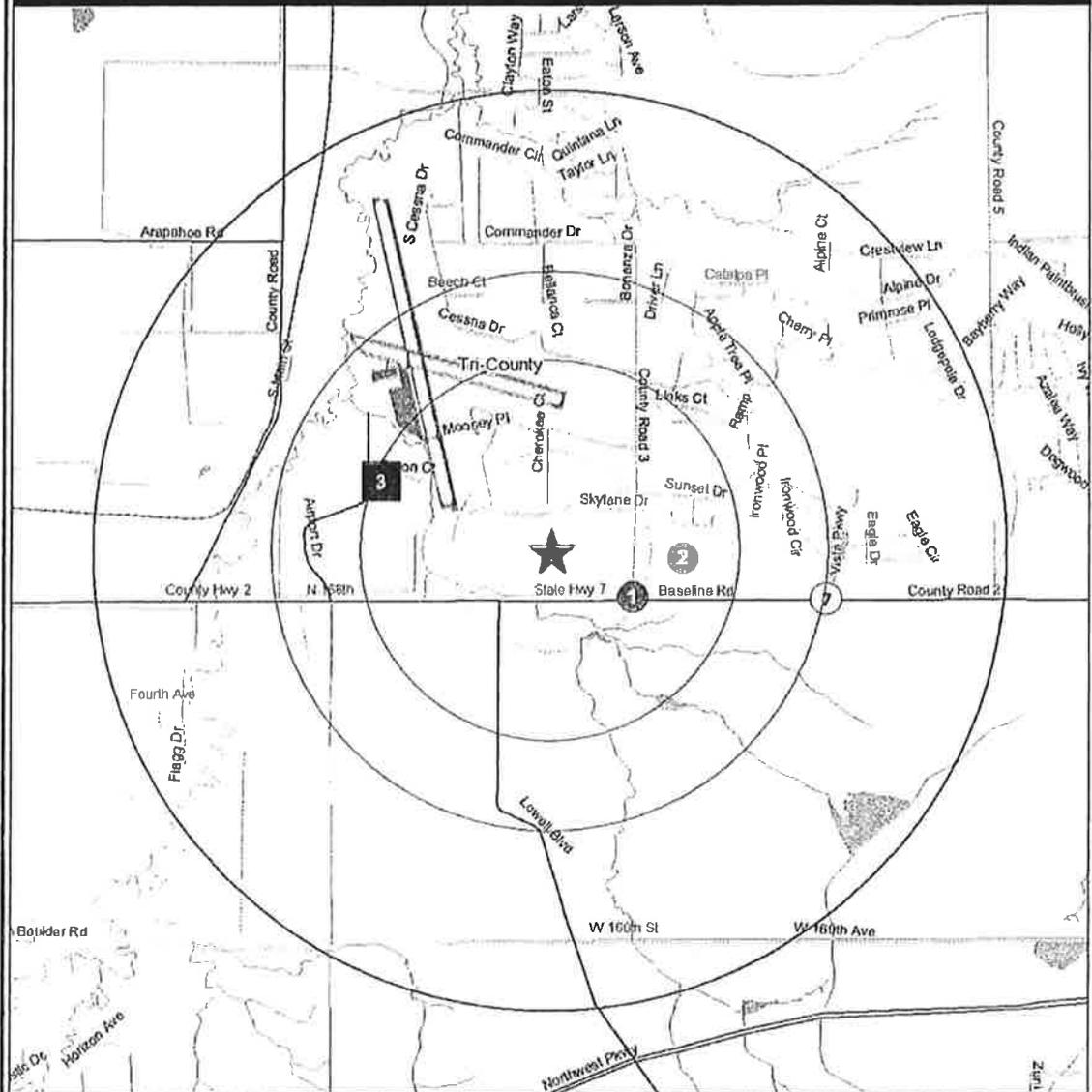
Contents: Overview Map
Close-up Map
Executive Summary
• mapped sites
• unmapped sites
Detailed Findings
• mapped sites
• unmapped sites
Database Sources

This report complies with the requirements of EPA's AAI Rule and ASTM's E 1527-05 Standard for the records review of standard sources in a Phase One Environmental Site Assessment.

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environmental information

Overview Map



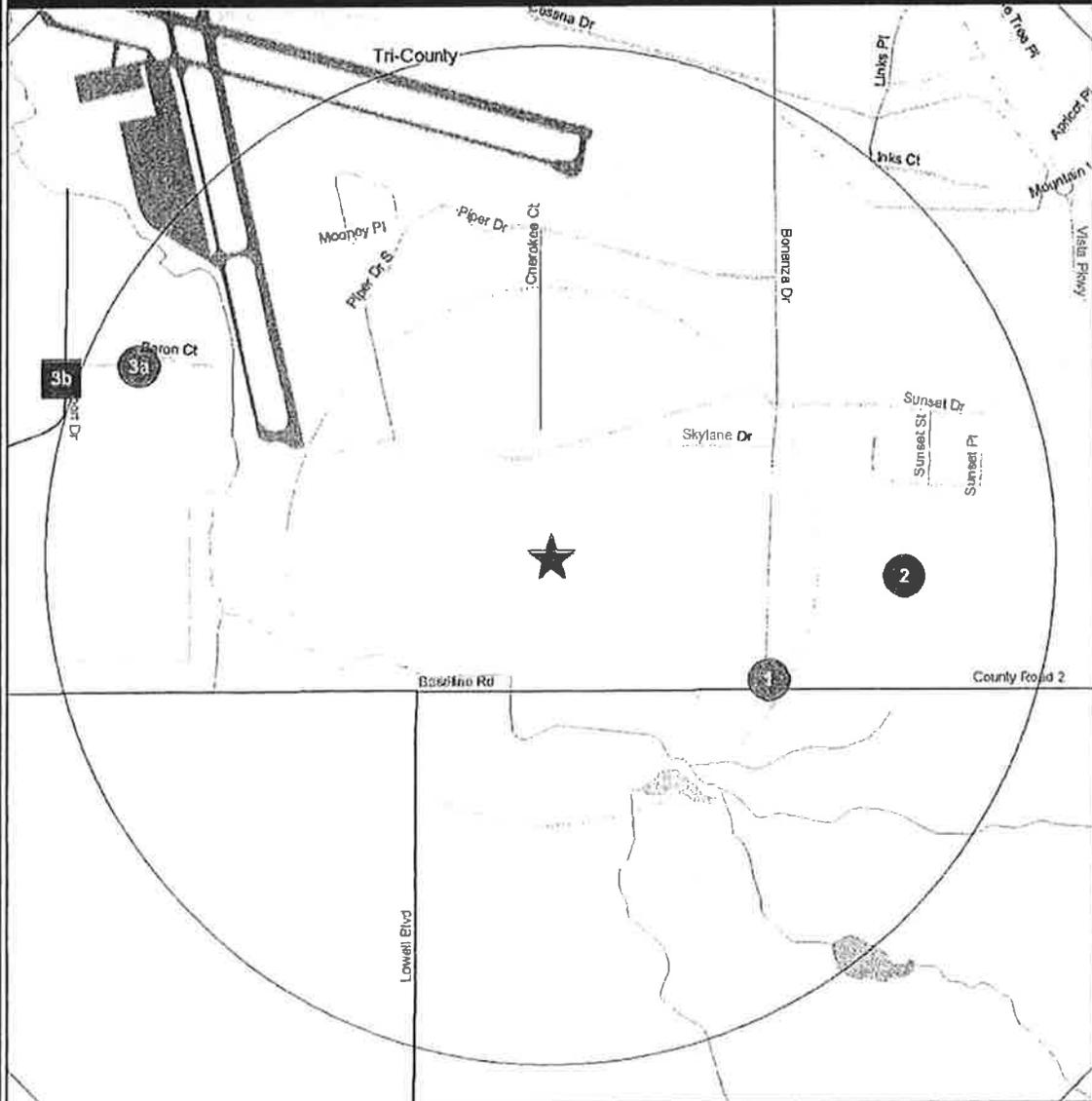
Database Categories > Subject Property	NPL/-, CORRACT			TSD, CERCLIS/+, VCL/+, SOLIDWASTE, TANKLEAK			TANK, AUL/+, SPILL, GENERATOR, OTHER		
	Single Site	Grouped Sites	Regional Site	Single Site	Grouped Sites	Regional Site	Single Site	Grouped Sites	Regional Site
★	#	#	#	#	#	#	#	#	#

Subject Property Buffer
0.28 mile radius

Outer Ring on Map
1.00 Mile beyond buffer

The ASTM Standard requires that distance be measured from a property's boundaries (not from a point). Accordingly, the specified buffer (dashed ring) has been drawn around the subject property point to approximate its boundaries. Each site point also has a buffer (0.04 mile is standard). Distance is measured from the subject property buffer to each site buffer.

Close-Up Map



Database Categories >	NPL/≠, CORRACT		TSD, CERCLIS/≠, VCL/≠, SOLIDWASTE, TANKLEAK		TANK, AUL/≠, SPILL, GENERATOR, OTHER	
	Single Site	Regional Site	Single Site	Regional Site	Single Site	Regional Site
Subject Property						

Subject Property Buffer
0.28 mile radius

Outer Ring on Map
0.25 Mile beyond buffer

The ASTM Standard requires that distance be measured from a property's boundaries (not from a point). Accordingly, the specified buffer (dashed ring) has been drawn around the subject property point to approximate its boundaries. Each site point also has a buffer (0.04 mile is standard). Distance is measured from the subject property buffer to each site buffer.

Executive Summary - Mapped Sites

Search Distance (miles) >					1.00	1.00	0.50	0.50	0.50	0.50	0.50	0.25	0.25	0.25	0.25	0.25	
					NPL/=	CORRACT	TSD	CERCLIS/=	VCL/=	SOLIDWASTE	TANKLEAK	TANK	AUL/=	SPILL	GENERATOR	OTHER	
MAP #	SITE NAME	ADDRESS	Distance (miles)* and Direction														
1	INCIDENT #364806	0500 WELD COUNTRY RD 3 A	* *														
2	BETTY PICRAUX	050 CNTY RD 3	0.05 SE														
3a	TRI COUNTY AIRPORT	350 BARON CT	0.16 NW														
3b	ERIE TRI-COUNTY AIRPORT	395 AIRPORT DR	0.23 NW														
4 Sites Within 0 - 1/4 mile				5 Findings >	0	0	0	0	0	0	0	1	1	0	1	0	2
0 Sites Within 1/4 - 1/2 mile				0 Findings >	0	0	0	0	0	0	0	0	0	0	0	0	0
0 Sites Within 1/2 - 1 mile				0 Findings >	0	0	0	0	0	0	0	0	0	0	0	0	0
4 SITES TOTAL				5 FINDINGS TOTAL >	0	0	0	0	0	0	0	1	1	0	1	0	2

* Distances and directions are approximate and should be confirmed during the site visit. Although Satisfi uses the best and most current digital street maps available, mapping by address is not an exact science. Sites are seldom mapped right at their centroids, and the buffers used to approximate their boundaries are inherently imprecise. If any site buffer (0.04 mile radius) overlaps the subject property buffer (see map), distance and direction are not reported. If the location of a site is off by a city block or more, a revised map can be requested at no charge.

< Tagalong findings are included to provide additional details. For instance, if a Tank Leak is found beyond the search distance for Tanks, the corresponding Tank listing is reported anyway in order to add useful information about the tank contents, age, etc.

Category	Description
NPL/=	Federal National Priority List Superfund site list
"	State- and Tribal-equivalent NPL
CORRACTS	Federal RCRA Corrective Action facilities list
TSD	Federal RCRA Treatment, Storage or Disposal facilities list
CERCLIS/=	Federal CERCLIS list
"	Federal Delisted NPL site list
"	Federal CERCLIS NFRAP site list
"	State- and Tribal-equivalent CERCLIS
VCL/=	State and tribal voluntary cleanup list sites
"	State and tribal Brownfield sites
SolidWaste	State and tribal landfill and/or solid waste disposal site lists
"	Local Lists of Landfill/Solid Waste Disposal Sites
TankLeak	State and tribal leaking storage tank lists
Tank	State and tribal registered storage tank lists
Generator	Federal RCRA generators list
Spill	Federal ERNS list
AUL/=	Federal institutional control/ engineering control registries
"	State and tribal institutional control/engineering control registries
Other	RCRA-listed sites that are not CORRACTS, TSD or generators

The specific database for each finding (e.g., CERCLIS vs. NFRAP) is identified in the Detailed Findings. Additional information on each database is presented in the Database Sources section.

Unmapped Sites

THESE SITES WITHOUT GOOD ADDRESSES DO NOT NEED TO BE TRACKED DOWN. The ASTM Standard says in Section 8.1.4.3, "Listings in publicly available records which do not have adequate address information to be located geographically are not generally practically reviewable." The only reason for reporting these sites is on the slight possibility that their location might be revealed during the site visit, historical research, through personal knowledge, etc. Each site has some detail (e.g., city, county) in common with the subject property. Please review the Detailed Findings for any additional details that might indicate a site is close enough and significant enough to impact the subject property. If a location can be firmly identified, please call Satisfi and a revised report will be issued accordingly.

THE PHASE ONE REPORT DOES NOT NEED TO DISCUSS EACH OF THESE SITES. The ASTM Standard specifically says in section 8.1.9, "the environmental professional may make statements applicable to multiple sites (for example, a statement to the effect that none of the sites listed is likely to have a negative impact on the property except ...)".

SITE NAME	ADDRESS	NPL#	CORRACT	TSD	CERCLIS#	VCL#	SOLIDWASTE	TANKLEAK	TANK	AUL#	SPILL	GENERATOR	OTHER
AL CARTON DUMP	ADDRESS NOT REPORTED;						■						
COLORADO LANDFILL	NO ADDRESS REPORTED;						■						
HORST/DEAMIN	ADDRESS NOT REPORTED;						■						
LANDFILL SYSTEMS, INC.	NO ADDRESS REPORTED;						■						
NEUHAUSER DUMP	ADDRESS NOT REPORTED;						■						
OLD ERIE LANDFILL	ADDRESS NOT REPORTED;						■						
ROCKY MOUNTAIN PROPELLERS INC	TRICOUNTY AIRPORT;											●	
7 TOTAL FINDINGS >		0	0	0	0	0	6	0	0	0	0	1	0

Limitation of Liability: Please note that the accuracy of public records cannot be guaranteed, nor can this search of those records. No warranty is made or implied regarding this report. By reviewing this report, the reader agrees to assume all related risk and to release Satisfi from liability for any damages. However, if this report is not satisfactory for any reason, a full refund will be issued.

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Detailed Findings - Mapped Sites

INCIDENT #364806 0500 WELD COUNTRY RD 3 AND HIGHWAY 7, LAFAYETTE, CO	Map # ▶ ~0.00 mile	1
Emergency Response Notification System (ERNS) - Source 135/ ERNS		Spill
Satisfi ID: 00135-0001592 NRC Report #: 364806 Incident Date: 10/18/96 Material Quantity: OIL: DIESEL 0 UNKNOWN AMOUNT Material Quantity: OIL, MISC: MOTOR 0 UNKNOWN AMOUNT Full Report Link: www.nrc.uscg.mil/reports/rwservlet?standard_web+inc_seq=364806		
BETTY PICRAUX 050 CNTY RD 3, ERIE, CO 805168118	Map # ▶ ~0.05 mile SE	2
See RCRIS Activity below - Source 153/ RCRIS		Other
Satisfi ID: 00153-0005620 RCRA Handler ID: COR000011049 EPA Facility ID: Contact: BETTY PICRAUX E FLORENCE BLVD # 133, CASA GRANDE, AZ 85222 5204267133 Owner: BETTY PICRAUX RCRIS Activity: 01-NOV-1999 - Not a Generator RCRIS Violations: None		
TRI COUNTY AIRPORT 350 BARON CT, ERIE, CO 80516	Map # ▶ ~0.16 mile NW	3a
See RCRIS Activity below - Source 153/ RCRIS		Other
Satisfi ID: 00153-0003895 RCRA Handler ID: COD983776550 Contact: SUE HURD 395 AIRPORT DR, ERIE, CO 80516 3036619146 Owner: TRI COUNTY AIRPORT RCRIS Activity: 23-DEC-1996 - Not a Generator RCRIS Violation: 23-MAR-1991 - Generators - General - Complied: 12-DEC-1995		
TRI COUNTY AIRPORT 395 AIRPORT DR, ERIE, CO, 80516	Map # ▶ ~0.23 mile NW	3b
Registered Tank - Source 149/ TANKS		TANK
Satisfi ID: 00149-0007792 Facility ID: 8024 Owner: 7753 - TOWN OF ERIE, PO BOX 750, ERIE, CO, 80516 Tank Details: 8024-1 3000 gal. UST Contents: Av Gas Status: OPEN Tank Details: 8024-2 8000 gal. UST Contents: Gasoline Status: OPEN Tank Details: 8024-3 3000 gal. UST Contents: JetFuel Status: OPEN		
ERIE TRI-COUNTY AIRPORT 395 AIRPORT DR, ERIE, 80516	Map # ▶ ~0.23 mile NW	3b
Tank Leak - Source 150/ Tank Leaks		TANKLEAK
Satisfi ID: 00150-0002362 Alternate Facility Name: TRI COUNTY AIRPORT		

Detailed Findings - Mapped Sites (Cont.)

(Cont.)		3b
Event ID:	2546	
Date Reported:	6/11/97	
File Status:	Closed	
TRI COUNTY AIRPORT		3b
396 AIRPORT DR, ERIE, 80516		Map # ► ~0.23 mile NW
Tank Leak - Source 150/ Tank Leaks		TANKLEAK
Satisfi ID:	00150-0006923	
Event ID:	7563	
Date Reported:	7/22/99	
File Status:	Closed	

Unmapped Sites

AL CARTON DUMP ADDRESS NOT REPORTED, ERIE, CO		Unmapped
Waste or Fill Site - Source 70/ CO Old Landfills		SOLIDWASTE
Satisfi ID:	00070-0002198	
Source Name:	CO Old Waste Sites	
Source Description:	"In the early 1980's the Hazardous Materials Waste Management Division conducted a survey of staff members and local Agencies. The information gathered was compiled in 1984 for sites that were known or thought to have waste issues. This information is not complete and generally not very definitive or verifiable. This data became the Solid Waste Historical Data. The data is not maintained and has not been since the late 1980's. The Hazardous Materials Waste Management Division is not responsible and shall not be liable to the user for damages of any kind arising out of the use of this data or information."	
Site Type:	LANDFILL	
Fill Material:	LIQUIDS.	
Size (acres):	1 - 10	
Comments:	USED FOR SEPTIC TANK & GREASE TRAP CLE. IMPACT: SW.	
Colorado Landfill No Address Reported, Erie, CO		Unmapped
Waste or Fill Site - Source 70/ CO Old Landfills		SOLIDWASTE
Satisfi ID:	00070-0000396	
Source Name:	Weld County CO Old Landfills	
Source Description:	This list identifies known or suspected landfills or illegal dumps. The list is not being updated. From Weld County Department of Public Health and Environment - Environmental Health Division.	
Township Range Section:	E2,NE4 1/68/29	
HORST/DEAMIN ADDRESS NOT REPORTED, ERIE, CO		Unmapped
Waste or Fill Site - Source 70/ CO Old Landfills		SOLIDWASTE
Satisfi ID:	00070-0002200	
Source Name:	CO Old Waste Sites	
Source Description:	"In the early 1980's the Hazardous Materials Waste Management Division conducted a survey of staff members and local Agencies. The information gathered was compiled in 1984 for sites that were known or thought to have waste issues. This information is not complete and generally not very definitive or verifiable. This data became the Solid Waste Historical Data. The data is not maintained and has not been since the late 1980's. The Hazardous Materials Waste Management Division is not responsible and shall not be liable to the user for damages of any kind arising out of the use of this data or information."	
Site Type:	LANDFILL	
Fill Material:	REFUSE.	
Size (acres):	50 - 100	
Landfill Systems, Inc. No Address Reported, Erie, CO		Unmapped
Waste or Fill Site - Source 70/ CO Old Landfills		SOLIDWASTE
Satisfi ID:	00070-0000397	
Source Name:	Weld County CO Old Landfills	
Source Description:	This list identifies known or suspected landfills or illegal dumps. The list is not being updated. From Weld County Department of Public Health and Environment - Environmental Health Division.	

Unmapped Sites (Cont.)

(Cont.)		Unmapped
Township Range	S2,SW4 1/68/20	
Section:		
NEUHAUSER DUMP ADDRESS NOT REPORTED, ERIE, CO		Unmapped
Waste or Fill Site - Source 70/ CO Old Landfills		SOLIDWASTE
Satisfi ID:	00070-0002201	
Source Name:	CO Old Waste Sites	
Source Description:	"In the early 1980's the Hazardous Materials Waste Management Division conducted a survey of staff members and local Agencies. The information gathered was compiled in 1984 for sites that were known or thought to have waste issues. This information is not complete and generally not very definitive or verifiable. This data became the Solid Waste Historical Data. The data is not maintained and has not been since the late 1980's. The Hazardous Materials Waste Management Division is not responsible and shall not be liable to the user for damages of any kind arising out of the use of this data or information."	
Operator/Owner/Other:	// NEUHAUSER	
Site Type:	LANDFILL	
Fill Material:	REFUSE.	
Size (acres):	10 - 50	
OLD ERIE LANDFILL ADDRESS NOT REPORTED, ERIE, CO		Unmapped
Waste or Fill Site - Source 70/ CO Old Landfills		SOLIDWASTE
Satisfi ID:	00070-0002197	
Source Name:	CO Old Waste Sites	
Source Description:	"In the early 1980's the Hazardous Materials Waste Management Division conducted a survey of staff members and local Agencies. The information gathered was compiled in 1984 for sites that were known or thought to have waste issues. This information is not complete and generally not very definitive or verifiable. This data became the Solid Waste Historical Data. The data is not maintained and has not been since the late 1980's. The Hazardous Materials Waste Management Division is not responsible and shall not be liable to the user for damages of any kind arising out of the use of this data or information."	
Operator/Owner/Other:	// PRATT PROPERTY LANDF	
Site Type:	LANDFILL	
Fill Material:	SLUDGE	
Size (acres):	10 - 50	
Comments:	AT FORMER LANDFILL NUMEROUS CHEMICALS. HAZARD TYPE: METHANE. IMPACT: GW.	
ROCKY MOUNTAIN PROPELLERS INC TRICOUNTY AIRPORT, ERIE, CO 80516		Unmapped
Small Quantity Generator - Source 153/ RCRIS		Generator
Satisfi ID:	00153-0009499	
RCRA Handler ID:	COD981541535	
Contact:	DAVE HAMPEL 2865 AIRPORT DR, ERIE, CO 80516 3036657905	
Owner:	ROCK, ROBERT	
Operator:	ROCKY MOUNTAIN PROPELLERS INC	
RCRIS Activity:	13-NOV-1998 - Small Quantity Generator Activity	
RCRIS Activity:	17-OCT-2001 - Small Quantity Generator Activity	

Unmapped Sites (Cont.)

(Cont.)

Unmapped

RCRIS Activity: 02-OCT-2003 - Small Quantity Generator Activity

RCRIS Violations: None

Database Sources

Category	1 mile search radius												
CORRACT	<p>Source: 153 / RCRIS Corrective Action (CORRACT) sites have hazardous waste problems, often involving contamination. Under the Resource Conservation & Recovery Act (RCRA), the owners or operators of these facilities are responsible for investigating and, as necessary, cleaning up releases. Nationwide, there are approximately 6,500 CORRACT sites. CORRACT sites are a subset of the EPA's Resource Conservation & Recovery Information System (RCRIS).</p> <p>Agency Name: US EPA - United States Environmental Protection Agency, Office of Solid Waste</p> <p>Agency Website: www.epa.gov/epaoswer/hazwaste/ca/facility.htm</p>												
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Last Requested:	09/13/07												
NPL/=	<p>Source: 147 / CERCLIS The National Priority List (NPL) identifies sites with confirmed contamination that are either proposed to be or are in the process of being cleaned up under the direction of the US EPA Superfund Program. Nationwide, there are approximately 1,600 Superfund sites. NPL sites are a subset of the EPA's Comprehensive Environmental Response, Compensation & Liability Information System (CERCLIS).</p> <p>Agency Name: US EPA - United States Environmental Protection Agency, Superfund Program</p> <p>Agency Website: http://www.epa.gov/superfund/sites/cursites/index.htm</p>												
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Last Requested:	07/31/07												
NPL/=	<p>Source: 116 / SPL There is no State Priority List (SPL) for Colorado. However, there are twenty sites that the state seems to place in the same category as NPL sites. Eighteen of them are UMTRA (Uranium Mill Tailing Remedial Action) sites, one is a NRDS site (Natural Resource Damages Site), and one is a Private Cleanup Site (Non-Superfund). Thousands of UMTRA "vicinity properties" have also been identified where mill tailings were used as sand in concrete, roadbase, trenches, bricks, etc. Such properties have been remediated in Durango, Grand Junction, Fruita, Palsade, Gunnison, Maybell, Naturita and Rifle, but some unidentified tailings may still remain in and around these communities. CDPHE's list of vicinity properties is not publicly available and was not searched for this report. Property-specific information is available through the CDPHE Grand Junction office. See www.cdphe.state.co.us/hm/rptailing.html.</p> <p>Agency Name: CDPHE - CO Dept of Public Health & Environment, Hazardous Materials & Waste Mgmt Div</p> <p>Agency Website: www.cdphe.state.co.us/hm/rp_gen.asp AND http://www.cdphe.state.co.us/hm/sf_sites.asp</p>												
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Satisfi Obtained:	06/30/06	Agency Contact:	None										
Last Requested:	07/24/07												
NPL/=	<p>Source: 11 / Denver Radium Although the Denver Radium site is reported as a single NPL listing, it includes 66 locations grouped into 11 Operable Units spread throughout metro Denver. Because of the large number of scattered locations, Satisfi treats this NPL site as a separate source. For more information, please visit the Denver Radium web site at: www.cdphe.state.co.us/hm/rpdenrad.asp</p> <p>Agency Name: US EPA - United States Environmental Protection Agency, Superfund Program</p> <p>Agency Website: www.epa.gov/region08/sf/shhk/index.html AND http://www.cdphe.state.co.us/hm/rpdenrad.asp</p>												
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Agency Updated:	04/10/06	Updated by Agency:	Monthly										
Satisfi Obtained:	04/10/06	Agency Contact:	None										
Last Requested:	07/14/06												
Category	1/2 mile search radius												
TSD	<p>Source: 163 / RCRIS Facilities that Treat, Store or Dispose of hazardous waste (TSD sites) are regulated under the Resource Conservation & Recovery Act (RCRA). Nationwide, there are approximately 2,000 TSD facilities. TSD sites are a subset of the Resource Conservation & Recovery Information System (RCRIS).</p> <p>Agency Name: US EPA - United States Environmental Protection Agency, Office of Solid Waste</p> <p>Agency Website: www.epa.gov/epaoswer/hazwaste/ca/facility.htm</p>												
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Last Requested:	09/13/07												

Database Sources (Cont.)

Category	1/2 mile search radius (Cont.)
CERCLIS/=	<p>Source: 147 / CERCLIS The Comprehensive Environmental Response, Compensation, & Liability Information System (CERCLIS) identifies potential and confirmed hazardous waste sites that are being assessed by EPA for possible inclusion on the National Priority List (NPL). If a site does not qualify for the NPL, it is removed from CERCLIS and archived on the No Further Remedial Action Planned (NFRAP) list. There are over 11,000 CERCLIS sites nationwide.</p> <p>Agency Name: US EPA - United States Environmental Protection Agency, Superfund Program Agency Website: http://www.epa.gov/superfund/altas/cersites/index.htm</p>
	<p>Agency Updated: 07/31/07 Updated by Agency: Monthly Satisfi Obtained: 07/31/07 Agency Contact: None Last Requested: 07/31/07</p>
CERCLIS/=	<p>Source: 148 / NFRAP The No Further Remedial Action Planned (NFRAP) database identifies sites where assessment has been completed and EPA has determined that no further steps will be taken to list the site on the National Priority List (NPL). This may mean that: a) no contamination was found; b) contamination was removed; or c) contamination was not serious enough to qualify for the NPL. Nationwide, there are over 33,000 NFRAP sites. NFRAP sites are synonymous with Archived CERCLIS sites.</p> <p>Agency Name: US EPA - United States Environmental Protection Agency, Superfund Program Agency Website: http://www.epa.gov/superfund/sites/arcasites/index.htm</p>
	<p>Agency Updated: 08/01/07 Updated by Agency: Monthly Satisfi Obtained: 08/05/07 Agency Contact: None Last Requested: 08/05/07</p>
SOLIDWASTE	<p>Source: 70 / CO Old Landfills This database is proprietary to Satisfi and represents a compilation of eleven state and local agency sources. The agencies generated these lists on a one-time basis and do not expect to update them. A more detailed description of the applicable source is included with any findings reported from this database. The eleven sources are:</p> <ol style="list-style-type: none"> 1. Adams County CO Old Landfills 2. Arapahoe County CO Old Landfills 3. Douglas County CO Old Landfills 4. Weld County CO Old Landfills 5. Boulder County CO Old Landfills 6. Jefferson County CO Old Landfills 7. Denver CO Methane Study 8. CO Methane Study 9. DRCOG Methane Study 10. Denver CO Old Fil Sites 11. CO Old Waste Sites <p>Agency Name: US EPA and various State and Local Agencies Agency Website: No website available</p>
	<p>Agency Updated: 02/06/03 Updated by Agency: Never Satisfi Obtained: 02/06/03 Agency Contact: Varies Last Requested: 02/06/03</p>
SOLIDWASTE	<p>Source: 152 / CO CDPHE Landfills These solid waste facilities have received permits from the state. The facilities may be open or closed.</p> <p>Agency Name: CDPHE - CO Dept of Public Health & Environment, Hazardous Materials & Waste Mgmt Div Agency Website: www.cdphe.state.co.us/hm/cp_gen.asp#cp_swu</p>
	<p>Agency Updated: 08/31/07 Updated by Agency: No set schedule Satisfi Obtained: 08/31/07 Agency Contact: Mira Neumiller Last Requested: 08/31/07</p>
TANKLEAK	<p>Source: 23 / LUST Trust Tanks Suspected tank leaks have been discovered at these sites, but the facility responsible for the leak has not been identified. The state's investigation and search for responsible parties is paid for out of the state's Leaking Underground Storage Tank (LUST) Trust fund.</p> <p>Agency Name: Colorado Dept of Labor & Employment, Division of Oil & Public Safety, State Fund Section Agency Website: http://oil.cdle.state.co.us/OILFund/fund_home.asp</p>
	<p>Agency Updated: 01/01/00 Updated by Agency: Database Closed Satisfi Obtained: 11/16/02 Agency Contact: Wendy Shoup Last Requested: 11/15/02</p>
TANKLEAK	<p>Source: 150 / Tank Leaks These are above-ground and underground storage tank leaks that have been reported to the state.</p> <p>Agency Name: Colorado Dept of Labor & Employment, Division of Oil & Public Safety, Oil Inspectors Section Agency Website: http://cosljs.cdle.state.co.us/home.asp</p>
	<p>Agency Updated: 08/28/07 Updated by Agency: Frequently Satisfi Obtained: 08/28/07 Agency Contact: Wendy Shoup Last Requested: 08/28/07</p>

Database Sources (Cont.)

Category		1/2 mile search radius (Cont.)	
VCL=	<p>Source: 134 / CO VCL VCUP Colorado's Voluntary Cleanup List (VCL) identifies sites where owners have submitted for state approval either a Voluntary Cleanup Plan (VCUP) or a request for a No Action Determination (NAD). The state's cleanup decisions are based on existing standards and the proposed use of the property. Owners are responsible for the cleanup and verification.</p> <p>Agency Name: CDPHE - CO Dept of Public Health & Environment, Hazardous Materials & Waste Mgmt Div Agency Website: www.cdphe.state.co.us/hm/voluntarycleanup.asp</p>	<p>Agency Updated: 04/18/07 Updated by Agency: No set schedule Satisfi Obtained: 04/18/07 Agency Contact: Mark Walker Last Requested: 07/24/07</p>	
VCL=	<p>Source: 137 / Federal Brownfields Management System The Brownfields Management System (BMS) is the official EPA database of the Brownfields Program. Property-level information contains basic location data about a physical area being targeted within the overall grant. More detailed information about each property is captured including information about specific tracts within a property, and includes data regarding zoning, former use(s), contaminants, affected media, and assessment, cleanup and redevelopment activities. Although the more detailed information is not available for download, it can be viewed at the web address below.</p> <p>Agency Name: US EPA - United States Environmental Protection Agency, Brownfields Management System Agency Website: http://www.epa.gov/enviro/html/bms/index.html</p>	<p>Agency Updated: 04/26/07 Updated by Agency: No set schedule Satisfi Obtained: 04/26/07 Agency Contact: None Last Requested: 07/11/07</p>	
Category		1/4 mile search radius	
TANK	<p>Source: 149 / TANKS These are above-ground and underground storage tanks that have been registered with the state.</p> <p>Agency Name: Colorado Dept of Labor & Employment, Division of Oil & Public Safety, Oil Inspectors Section Agency Website: http://costis.cdle.state.co.us/home.asp</p>	<p>Agency Updated: 08/28/07 Updated by Agency: Frequently Satisfi Obtained: 08/28/07 Agency Contact: Wendy Shoup Last Requested: 08/28/07</p>	
SPILL	<p>Source: 135 / ERNS The Emergency Response Notification System (ERNS) contains data on all releases of oil and hazardous substances reported to the National Response Center (NRC) and to the EPA since 1986. The information is usually called in by a person associated with the facility or vehicle that had the release, although government agencies and the public at large may also call. All calls are recorded without regard for their significance or accuracy, and information is often sketchy. Nationwide, approximately 30-35,000 reports are recorded every year.</p> <p>Agency Name: US EPA - United States Environmental Protection Agency, National Response Center (NRC) Agency Website: www.nrc.unep.mil/wdbcgi/wdbcgi.exe/WWWUSER/WEBDB/foia_query.show_parms</p>	<p>Agency Updated: 04/20/07 Updated by Agency: Annually Satisfi Obtained: 04/20/07 Agency Contact: None Last Requested: 04/20/07</p>	
GENERATOR	<p>Source: 153 / RCRIS These facilities generate hazardous waste and are regulated under the Resource Conservation & Recovery Act (RCRA). Generators are a subset of the Resource Conservation & Recovery Information System (RCRIS).</p> <p>Agency Name: US EPA - United States Environmental Protection Agency, Office of Solid Waste Agency Website: www.epa.gov/epaoswer/hazwaste/ca/facility.htm</p>	<p>Agency Updated: 08/28/07 Updated by Agency: Monthly Satisfi Obtained: 09/13/07 Agency Contact: Tony Selle Last Requested: 09/13/07</p>	
AUL=	<p>Source: 146 / CO Environmental Real Covenants List CDPHE has the authority to approve requests to restrict the future use of a property using an enforceable agreement called an environmental real covenant. When a contaminated site is not cleaned up completely, land use restrictions may be used to ensure that the selected cleanup remedy is adequately protective of human health and the environment. Environmental covenants are available for review under the Colorado Open Records Act in the Hazardous Materials and Waste Management Division Records Center.</p> <p>Agency Name: CDPHE - CO Dept of Public Health & Environment, Hazardous Materials & Waste Mgmt Div Agency Website: http://www.cdphe.state.co.us/hm/encycovenants.asp</p>	<p>Agency Updated: 07/24/07 Updated by Agency: No set schedule Satisfi Obtained: 07/24/07 Agency Contact: None Last Requested: 07/24/07</p>	

Database Sources (Cont.)

Category	1/4 mile search radius (Cont.)	
AUL#	<p>Source: 151 / Federal Institutional Control Tracking System The EPA's Institutional Control Tracking System (ICTS) is currently limited to controls that are in place at Superfund sites. Institutional controls are typically administrative measures, such as groundwater use restrictions and property use restrictions, intended to prevent exposure to contamination that is not going to be removed from a site. Deed restrictions are normally recorded to document the controls.</p> <p>Agency Name: US EPA - United States Environmental Protection Agency, Institution Control Tracking System</p> <p>Agency Website: No website available</p>	
	Agency Updated: 08/02/07	Updated by Agency: No set schedule
	Satisfi Obtained: 08/02/07	Agency Contact: Michael Bellott
	Last Requested: 08/02/07	
AUL#	<p>Source: 143 / Federal Engineering Controls The EPA's Institutional Control Tracking System (ICTS) also tracks engineering controls at Superfund sites. Engineering controls are typically engineered systems, such as caps, liners, and slurry walls, intended to prevent exposure to contamination that is not going to be removed from a site.</p> <p>Agency Name: US EPA - United States Environmental Protection Agency, Institution Control Tracking System</p> <p>Agency Website: No website available</p>	
	Agency Updated: 08/02/07	Updated by Agency: No set schedule
	Satisfi Obtained: 08/02/07	Agency Contact: Michael Bellott
	Last Requested: 08/02/07	
OTHER	<p>Source: 153 / RCRIS These facilities are listed on the Resource Conservation & Recovery Information System (RCRIS) but don't fit into the category of CORRACTS, TSDs, or Generators. Many of these facilities are on the list simply because they notified EPA that they did NOT generate hazardous waste. Others are hazardous waste Transporters, Non-Notifiers (facilities suspected of handling hazardous waste without proper authorization), former Generators, etc.</p> <p>Agency Name: US EPA - United States Environmental Protection Agency, Office of Solid Waste</p> <p>Agency Website: www.epa.gov/epaoswer/hazwaste/ca/facility.htm</p>	
	Agency Updated: 08/28/07	Updated by Agency: Monthly
	Satisfi Obtained: 09/13/07	Agency Contact: Tony Selle
	Last Requested: 09/13/07	

Department of Community Development
Planning Division



The Town of Erie
645 Holbrook St.
P.O. Box 750
Erie, CO 80516
(303) 926-2773
FAX (303) 926-2706

Memo

To: Todd A. Johnson
From: Todd Bjerkaas
Date: October 15, 2014
Re: SK-13-00035 Sierra Vista Sketch Plan (1st Review)
Community Development Review Comments from Development Review Team Meeting on
October 9, 2014.
cc: Jeff Handlin, Carl Nelson, Matt Deibel, Brian Moss, Marty Ostholthoff, Gary Behlen, Russell
Pennington, Matt Wiederspahn, Farrell Buller

Dear Todd,

Thank you for submitting the Sketch Plan for Sierra Vista. The Development Review Team (DRT) met on Thursday, October 9, 2014. In attendance were Community Development and Public Works. Following are the comments from the meeting that need to be addressed and/or changed for the Sketch Plan. Redlines of the sketch plan sheets are attached as well for reference. All code references herein are for Title 10-UDC (Code). Note that Public Works comments are being included under separate cover.

Please provide a written response to each of the comments below with your re-submission. The resubmittal should contain:

- A PDF of the resubmittal
- 5 copies – 11x17 sheets of the revised plans (CD, PW, P&R, OSTAB, Public) and all response letters to the Town
- 1 copy – full size sheets of the revised plans (CD)

Notebook Section 7 – Sketch Plan Exhibits

1. **Street Layout**
 - a. Show the dedication of ROW at Bonanza Dr. to accommodate the southbound right turn lane.
 - b. Show the curb cuts for the Vista Ridge subdivision and Kum & Go gas station on the east side of Bonanza.
 - c. Show edge of payment for Bonanza Drive along the length of the Sierra Vista subdivision.
 - d. The southernmost entrance ROW from Bonanza is 60' wide. Given the number of lots and the commercial volume of vehicles from Tract F, the ROW section may need to be wider depending on the conclusions of the traffic study at Preliminary Plat.
2. **Lot Layout**
 - a. Tract A adjacent to Lot 192 is to be a minimum of 30' in width (10.5.4.E.12). The tract narrows to 20' in this area.

- b. Staff recommends widening Tract B east of Lot 1 to a minimum of 30' to provide a landscape tract and buffer along Bonanza consistent with Tract A.
 - c. Several blocks are longer than 900'. Through-block connections, a minimum of 30' wide and located in a tract, are required in blocks that are 900 feet or more in length (10.6.5.F.2.c).
 - d. A trail is required in Tract C (10.6.5.F.2.c). Provide a tract, a minimum of 30' in width, along the rear (west side) of Lots 43 through 49 to accommodate the perimeter trail.
 - e. Tract G that ties into the cul-de-sac to the north is to be a minimum of 35' in width (10.6.5.D.2.e & 10.6.5.F.2.d).
 - f. Several lots shown are less than 50' in width. Adjust lots to be a minimum of 50' wide for the LR zoning district (10.4.1.A). Any requests for lots narrower than 50' are to be included in a Planned Unit Development (PUD) overlay district rezoning application.
 - g. Show the approximate limits of detention areas.
3. Oil and Gas Wells and Production Facilities
- a. The ALTA shows three potential well-sites/drilling windows located on site. Further clarification of the mineral rights will be required at Preliminary Plat.
4. General Comments
- a. Provide a PARKS AND OPEN SPACE SUMMARY CHART that details the required versus provided acreage for pocket parks, neighborhood parks, community parks, and open space for the development.
 - b. Show preliminary drainage, utilities, easements, trails and sidewalks on the plans. Additional sheets are recommended.
 - c. Call out that existing overhead electric on and adjacent to the property will be buried.
 - d. Update the LAND USE SUMMARY CHART and TRACT SUMMARY CHART on Sheet 1 per the above comments.
 - e. See redlines for technical adjustments and previous comments.

Since review is a cumulative process and dependent on various criteria, we reserve the right to provide further comment(s) and request additional information upon receipt of this requested information. Please do not hesitate to contact me at 303.926.2773 for further clarification or with any questions or concerns that you may have.

Sincerely,

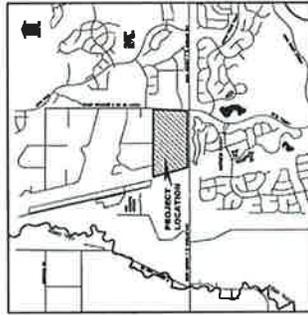


Todd Bjerkaas
Senior Planner

SIERRA VISTA SKETCH PLAN

A PORTION OF THE SOUTH 1/2 OF THE SOUTHEAST 1/4 OF SECTION 31, TOWNSHIP 1 NORTH, RANGE 68 WEST,
SIXTH PRINCIPAL MERIDIAN, TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
60.476 ACRES - 202 LOTS - 6 TRACTS
SK-14-00035

4 Show:
 - DRAINAGE
 - UTILITIES
 - EASEMENTS
 - TREES
 - SIDEWALKS



VICINITY MAP
1"=2000'

SHEET INDEX

1	TITLE SHEET
2	SITE PLAN
3	EXISTING CONDITIONS
3 TOTAL	

LAND SUMMARY CHART

TYPE	AREA (AC.)	% OF TOTAL AREA
RESIDENTIAL LOTS	31.43	52.00
TRACTS	16.50	27.36
PUBLIC ROW	10.52	17.40
TOTAL	60.476	100.00

TRACT SUMMARY CHART

TRACT	AREA (AC.)	USE	OWNERSHIP	MAINTENANCE
A	0.62	LANDSCAPE BUFFER	HOA	HOA
B	5.60	LANDSCAPE BUFFER / DETENTION	HOA	HOA
C	0.15	OPEN SPACE	HOA	HOA
D	5.43	LANDSCAPE BUFFER / DETENTION	HOA	HOA
E	0.12	OPEN SPACE	HOA	HOA
F	5.56	COMMERCIAL	PRIVATE	PRIVATE
G	0.92	POCKET PARK	HOA	HOA

PARKS & O.S. SUMMARY CHART

TYPE	REQUIRED	PROVIDED
PP	0.29	0.72
NP	1.69	-
CP	2.92	-
OS	9.58	-

CONTACTS:

THE TOWN OF ERIE
 845 HOLBROOK STREET
 P.O. BOX 750
 ERIE, CO 80521
 PHONE: (303) 694-2773
 CONTACT: TODD BURKAS

DEVELOPER
 HIGHWAY 7 AND BONANZA, LLC
 6033 EAST EASTER PLAC, SUITE 110
 DENVER, CO 80231
 PHONE: (303) 694-3148
 CONTACT: JEFF HANOUN

ENGINEER / PLANNER
 CALIBRE ENGINEERING, INC.
 9050 SOUTH PUEBLO BLVD, SUITE 105
 DENVER, CO 80234
 PHONE: (303) 730-3434
 CONTACT: TODD JOHNSON

**SIERRA VISTA
SKETCH PLAN
TITLE SHEET**

T1

1 of 3

0320 SEPTEMBER 8, 2014

Calibre
 Civil Engineering, Surveying
 Construction Management

13.T1.dwg
 08/28/14
 CHEAD SIERRA VISTA
 13.T1.dwg

BONANZA & HIGHWAY 7, LLC
 R.J.L. R.J.L. TAU



Memo

To: Todd Bjerkaas
From: Matt Wiederspahn, P.E., CFM, Development Engineer
Date: October 24, 2014
Subject: **Sierra Vista Rezoning**
CC: Russell Pennington
Wendi Palmer

Comments for Sketch Plan:

1. No access to Highway 7 is shown on the sketch plan. The current Highway 7 Access Control Plan only allows for a $\frac{3}{4}$ access at 1,320 feet west of Bonanza Drive.
2. A preliminary utility study is needed to determine the impacts to utility sizing due to the zoning changes.
3. An updated traffic study is needed to determine the traffic impacts of this proposed zoning change.
4. The Sierra Vista annexation agreement assumed 480 multi-family units for the Airport Sewer Interceptor Extension reimbursement. With the increase in residential area and change to single family units, an amendment to the Annexation Agreement may be needed to determine how the reimbursement will now be handled.



Town of Erie Open Space and Trails Advisory Board

From: Town of Erie Open Space and Trails Advisory Board (OSTAB)
To: Todd Bjerkaas, Senior Planner, Community Development
Date: October 7, 2014

Subject: Sierra Vista Sketch Plan

OSTAB has reviewed the package materials, compared them to Town planning documents, and has prepared the following comments, questions, and recommendations for the Town's consideration in evaluating this project.

The Natural Areas Inventory (NAI):

Discussion: In 2008, the Town engaged Walsh Environmental Scientists and Engineers of Boulder, Colorado, to identify and evaluate the natural areas within the Town's planning area. Over 125 areas were evaluated. Based upon a variety of characteristics, a numerical "summary rating" was calculated, and the habitat quality of each site was categorized as high, medium, or low. A portion of one area lies within this application: Coal Creek Tributary South of Airport, Site #110. This site has a "high" rating, based upon its wetland function, wetland quality, and habitat quality. The eastern portion of this NAI site is in Tract D of the application, primarily near Colorado State Highway 7 and away from the lots. However, the steep slope bends northward in one location; we estimate that lot 60 is only 10-15 feet from steep slopes, while lots 62 and 63 are 25-30 feet from them.

Recommendations:

1. Eliminate lot 60; it should be open space. We did notice a large gap between lots 63 and 64; perhaps that could be a building lot to replace lot 60;
2. Utmost care should be taken to ensure that no siltation and/or additional runoff into the wetlands occurs during construction of lots 52 through 72.

Open Space:

Discussion: The narrative states that "public and private space will be provided per the Town's criteria and is 18.50 acres." However, the tract summary chart on sheet T1 has only 0.28 acres of open space (Tracts C and D), and 11.74 acres of landscape buffer/detention (Tracts A, B, and D). We are unable to evaluate the open space component given this conflict.

Recommendations:

1. Identify exactly which tracts will be open space..
2. Reconcile the differences between the narrative and the tract summary chart.

Trails:

Discussion: We were surprised that there are no trails in the application, particularly given the high density of this application, and its location along roads with high and moderate traffic. Tracts A, B and D all provide ample space to have a perimeter trail. A trail should also be constructed on the north and west sides of Tract F, the commercial site.

There is one area in which a perimeter trail could not be built – the western side, where the rear

boundary of lots 45 through 48 are contiguous with the property boundary.

Recommendations:

1. Build a perimeter trail, details of which are in the discussion section above..
2. Alter the configuration of lots 45 through 48 to accommodate the perimeter trail.

Please pass this referral letter to the Applicant, and appropriate town departments, boards, and commissions. Thank you for your attention to these matters. OSTAB is available to discuss any of the above in more detail as needed.

Sincerely,

Open Space and Trails Advisory Board

Denise Brady
Kevin Chard
Dawn Fraser
Monica Kash
Nicole Littman
Ken Martin (Chair)
Joe Martinez

November 11, 2014

Mr. Todd Bjerkaas

Town of Erie
645 Holbrook Street
P.O. Box 750
Erie, CO 80516

Re: Sierra Vista Sketch Plan – Submittal #1 Comment Responses

Dear Mr. Bjerkaas,

We have reviewed the comments from the first submittal and met with you and Marty on November 10, 2014 to discuss these comments and the project and the following are our responses and the direction we received. Listed in *blue italics* below are the responses to the comments.

Please provide us with any additional questions or comments at your earliest convenience and let us know when we will be scheduled for the Planning Commission and posting requirements.

Feel free to contact me at 303-257-7653 or taj@calibre.us.com.

Sincerely,

CALIBRE ENGINEERING, INC.

A handwritten signature in black ink, appearing to read "Todd A. Johnson".

Todd A. Johnson, P.E.
Vice President
Director of Professional Services

Development Review Team Comments:

1. Street Layout

- a. Show the dedication of ROW at Bonanza DR. to accommodate the southbound right turn lane. *A traffic analysis as part of the Preliminary plat will identify the appropriate cross section for this segment of roadway and the plan will be adjusted if necessary.*
- b. Show the curb cuts for the Vista Ridge subdivision and Kum & Go gas station on the east side of Bonanza. *The curb cuts for both the Vista Ridge subdivision and the Kum & Go gas station have been shown.*
- c. Show edge of pavement for Bonanza Drive along the length of the Sierra Vista subdivision. *The edge of pavement has been updated for the entire length of the Sierra Vista subdivision along Bonanza Drive.*
- d. The southernmost entrance ROW from Bonanza is 60' wide. Given the number of lots and the commercial volume of vehicles from Tract F, the ROW section may need to be wider depending on the conclusions of the traffic study at Preliminary Plat. *A traffic analysis as part of the Preliminary plat will identify the appropriate cross section for this segment of roadway and the plan will be adjusted if necessary.*

2. Lot Layout

- a. Tract A adjacent to Lot 192 is to be a minimum of 30' in width (10.5.4.E.12). The tract narrows to 20' in this area. *The tract has been adjusted to 30'.*
- b. Staff recommend widening Tract B east of Lot 1 to a minimum of 30' to provide a landscape tract and buffer along Bonanza consistent with Tract A. *The tract has been adjusted to 30'.*
- c. Several blocks are longer than 900'. Through-block connections, a minimum of 30' wide and located in a tract, are required in blocks that are 900 feet or more in length (10.6.5.F.2.c). *Additional through-block connections have been added and street breakups with neck downs or medians will be further defined at the preliminary plat stage. The tract was not added at lots 84 & 100 due to the proposed grading. The upper tier of lots will be "walkouts" thus causing a large grade differential between the two streets.*
- d. A trail is required in Tract C (10.6.5.F.2.c). Provide a tract, a minimum of 30' in width, along the rear (west side) of Lots 43 through 49 to accommodate the perimeter trail. *A trail has been added to Tract C on the proposed Conceptual Layout Plan.*
- e. Tract G that ties into the cul-de-sac to the north is to be a minimum of 35' in width (10.6.5.D.2e & 10.6.5.F.2.d). *Tract G has been expanded to 35' in width at the tie-in point to the northern cul-de-sac.*
- f. Several lots shown are less than 50' in width. Adjust lots to be a minimum of 50' wide for the LR zoning district (10.4.1.A). Any requests for lots narrower than 50' are to be included in a Planned Unit Development (PUD) overlay district rezoning application. *Per conversations with Town lot widths will not be modified but defined on a PUD Overlay during the preliminary plat stage.*
- g. Show the approximate limits of detention areas. *Limits have been added.*



3. Oil and Gas Wells and Production Facilities
 - a. The ALTA shows three potential well-sites/drilling windows located on site. Further clarification of the mineral rights will be required at Preliminary Plat. *Noted.*

4. General Comments
 - a. Provide a PARKS AND OPEN SPACE SUMMARY CHART that details the required versus provided acreage for pocket parks, neighborhood parks, community parks, and open space for the development. *Parks and Open Space Summary Chart has been added to the title sheet.*
 - b. Show preliminary drainage, utilities, easements, trails and sidewalks on the plans. Additional sheets are recommended. *Conceptual Layout Plan has been included. This sheet includes proposed easements and trails.*
 - c. Call out that existing overhead electric on and adjacent to the property will be buried. *As discussed at the referenced meeting the poles are within CDOT's ROW and are not privy to the Towns franchise agreement.*
 - d. Update the LAND USE SUMMARY CHART and TRACT SUMMARY CHART on Sheet 1 per the above comments. *Land Use Summary Chart and Tract Summary Chart on the Title Sheet has been updated.*
 - e. See redlines for technical adjustments and previous comments.

Public Works Comments:

Comments for Sketch Plan:

1. No access to Highway 7 is shown on the sketch plan. The current highway 7 Access Control Plan only allows for a $\frac{3}{4}$ access at 1,320 feet west of Bonanza Drive. *Note has been added.*
2. A preliminary utility study is needed to determine the impacts to utility sizing due to the zoning changes. *As discussed with the Town the proposed plan is LR which is substantially lower than the proposed density of 480 multi-family units and 20 acres of commercial, it was agreed detailed reports will be provided at the Preliminary Plat stage.*
3. An updated traffic study is needed to determine the traffic impacts of this proposed zoning change. *As discussed with the Town the proposed plan is LR which is substantially lower than the proposed density of 480 multi-family units and 20 acres of commercial, it was agreed detailed reports will be provided at the Preliminary Plat stage.*
4. The Sierra Vista annexation agreement assumed 480 multi-family units for the Airport Sewer Interceptor Extension reimbursement. With the increase in residential area and change to single family units, an amendment to the Annexation Agreement may be needed to determine how the reimbursement will now be handled. *Noted.*



Open Space and Trails Advisory Board Comments:

The Natural Areas Inventory (NAI) Recommendations:

Discussion: In 2008, the Town engaged Walsh Environmental Scientists and Engineers of Boulder, Colorado, to identify and evaluate the natural areas within the Town's planning area. Over 125 areas were evaluated. Based upon a variety of characteristics, a numerical "summary rating" was calculated, and the habitat quality of each site was categorized as high, medium, or low. A portion of one area lies within this application: Coal Creek Tributary South of Airport, Site #110. This site has a "high" rating, based upon its wetland function, wetland quality, and habitat quality. The eastern portion of this NAI site is in Tract D of the application, primarily near Colorado State Highway 7 and away from the lots. However, the steep slope bends northward in one location; we estimate that lot 60 is only 10-15 feet from steep slopes, while lots 62 and 63 are 25-30 feet from them.

1. Eliminate lot 60; it should be open space. We did notice a large gap between lots 63 and 64; perhaps that could be a building lot to replace lot 60. *Comment noted, further detailed analysis of the plan and potential impacts will occur with the Preliminary Plat.*
2. Utmost care should be taken to ensure that no siltation and/or additional runoff into the wetlands occur during construction of lots 52 through 72. *Comment noted, further detailed analysis of the plan and potential impacts will occur with the Preliminary Plat.*

Open Space Recommendations:

Discussion: The narrative states that "public and private space will be provided per the Towns criteria and is 18.50 acres." However, the tract summary chart on sheet T1 has only 0.28 acres of open space (Tracts C and D), and 11.74 acres of landscape buffer/detention (Tracts A, B, and D). We are unable to evaluate the open space component given this conflict.

1. Identify exactly which tracts will be open space. *Comment noted, open space has been noted and will be further detailed with the Preliminary Plat.*
2. Reconcile the differences between the narrative and the tract summary chart. *Updated.*

Trails Recommendations:

Discussion: We were surprised that there are no trails in the application, particularly given the high density of this application, and its location along roads with high and moderate traffic. Tracts A, B and D all provide ample space to have a perimeter trail. A trail should also be constructed on the north and west sides of Tract F, the commercial site.

1. Build a perimeter trail, details of which are in the discussion section above. *Conceptual trail system has been added to the plan.*
2. Alter the configuration of lots 45 through 48 to accommodate the perimeter trail. *Lots have been altered for the trail.*



TOWN OF ERIE
BOARD OF TRUSTEE AGENDA ITEM
Board Meeting Date: December 9, 2014

SUBJECT: GENERAL BUSINESS

DEPARTMENT: Public Works
Gary Behlen, Director of Public Works

PRESENTER: **Russell Pennington, Deputy Director of Public Works**
Jason Hurd, Airport Manager
Steve Marshall, Airport Development Group

FISCAL INFORMATION:	Cost as Recommended:	\$ 0				
	Balance Available:	\$ 0				
	Budget Line Item					
	Number:	000 . 00 . 000 . 000000 . 000000				
	New Appropriation Required:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No			

STAFF RECOMMENDATION:

SUMMARY AND BACKGROUND OF SUBJECT MATTER:

An Airport Master Plan is a comprehensive study of an airport that describes the short-, medium-, and long-term development plans needed to meet future aviation demand. The Federal Aviation Administration (FAA) requires the Town of Erie to maintain an up-to-date Airport Master Plan (Plan) to remain eligible for federal grant funds. The current plan was developed in 2002. The FAA and the Colorado Department of Transportation (CDOT) determined that an update to the plan would be beneficial given current activity and economic conditions.

An airport master plan guides the physical growth of the airport to coordinate with the future demand for services, available funding and environmental considerations. The airport master plan uses text and drawings to explain plans for future development both on and around the airport.

The goal of a master plan is to provide the framework needed to guide future airport development that will cost-effectively satisfy aviation demand, while considering potential environmental and socioeconomic impacts. The guiding principle of the airport master planning process is the development of a safe and efficient airport that is responsive to area-wide comprehensive transportation planning.

The Erie Municipal Airport (EIK) Master Plan study has been underway for some time now. The Town of Erie was provided grants from both the FAA and CDOT to complete the master plan. Airport Development Group (ADG) was hired to help the Town in the development of the plan. An introductory meeting for the general public was held in November, 2012. Attached is the draft of Working Paper No. 1 which is the first step in a series of steps that will occur between now and July that will develop the new master plan for EIK.

Working Paper No. 1 includes an introduction, airport inventory, and Forecast of Aviation

Demand. Working Paper No. 1 has been submitted to and has been approved by the FAA.

In the coming months, a series of meetings and an open house for the general public is expected in order to get early and effective input from the Board of Trustees, airport users, and the public. The next meeting will be a Board Study Session on January 27, 2015 in which Working Paper No. 2 will be introduced and discussed. Working Paper No. 2 will include Facility Requirements and Alternatives Analysis.

Following the Working Paper No. 2 Study Session, an open house will be held in late March or early April. After this Open House, a second Working Paper No. 2 Study Session will be held with the Board of Trustees to discuss the Open House, consider alternatives/scenarios, and solicit a preferred development scheme.

The Draft Master Plan then will be created based upon the Trustee's preferred development scheme. A meeting will be planned for May to present the Draft Plan to the Board of Trustees. The Final Master Plan document is planned to be completed by the end of June. This is a very aggressive schedule for completion but the FAA has requested that the Master Plan be completed and adopted as quickly as possible due to funding for the project.

Schedule

- **December 9, 2014** - Working Paper No. 1 Draft Submitted to the Board of Trustees (BOT)
- **January 27, 2015** – BOT Study Session on Facility Requirements and Alternative Analysis
- **March/April 2015** (Date to be Determined) – Open House
- **April 2015** – BOT Study Session to discuss the Open House and to consider alternatives
- **May 2015** – Final Draft Presentation to BOT
- **June 2015** – Master Plan Completed, Approved by the BOT, and submitted to FAA

Board Goal

This serves the Board's goal for Infrastructure – Fund and provide essential infrastructure that corresponds with the planned rate of growth.

Staff Review:

_____ Town Attorney
_____ Town Clerk
_____ Community Development Director
_____ Finance Director
_____ Police Chief
 _____ Public Works Director

Approved by:

AJ Krieger
Town Administrator

ATTACHMENTS:

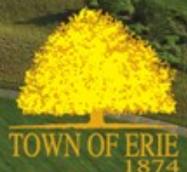
- a. Working Paper No. 1

Erie Municipal Airport

Erie, Colorado

Airport Master Plan Working Paper No. 1

DRAFT



AIRPORT MASTER PLAN UPDATE

Erie Municipal Airport (EIK)

Working Paper No. 1
October 2013

Prepared for the:

Town Board of Trustees
Town of Erie, Colorado

And for the:

State of Colorado
Department of Transportation
Division of Aeronautics

And for the:

US Department of Transportation
Federal Aviation Administration
Denver Airports District Office

Prepared by:



Airport Development Group, Inc.
Airport Consultants, Engineers and Planners
1776 South Jackson Street, Suite 950
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- A Project Introduction Presentation Materials
- B Working Paper No. 1 Presentation Materials

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Chapter One

Introduction



Chapter One – Introduction to the Plan

1.0 Introduction

The Town of Erie as owner, operator and sponsor of the Erie Municipal Airport has initiated this update of its Airport Master Plan to assess the Airport's existing and future role and to provide direction and guidance related to short- and long-term development. This study will find a course of action over a period of 20 years and beyond. This course of action will be advanced pursuant to Town Board of Trustees prerogative and provide compliance with current Federal Aviation Administration (FAA) airport design standards. This project and its process will be shepherded through the Airport Manager's Advisory Group (AMAG) and Town staff.

This planning is created to be both a forward-looking and flexible document. Resolutions and solutions are proposed well in advance of the likely need; and the plan is flexible enough to change with the need. Federal and state agencies are then similarly able to effectively program funding and be responsive to financing needs, should that be necessary.

The remainder of this chapter describes plan purpose, objectives and issues and identifies the four-phase planning process created for this planning effort.

1.1 Purpose

The purpose of the planning effort is to use developed methods to objectively evaluate and assess the needs of the Erie Municipal Airport

from an aviation use, development, and implementation perspective. Further, the planning will assist Town leadership to sort through the difficult questions and then, use that information to guide local decisions regarding airport infrastructure investment.

Development at the Erie Municipal Airport has plateaued in past years, but this may not continue. The potential need for infrastructure and additional facilities will be analyzed while looking to the future to determine how the airport may participate in the local and regional economy.

The product of this effort will provide the Town with a development program to meet aviation needs in the short- intermediate- and long-range planning periods. Aviation demand associated with the Airport makes it important to plan for aviation safety, capacity, proper facilities and land use compatibility. It is anticipated that benefits derived from the plan will positively affect the airport, its users, Town and the various County residents and the surrounding area.

1.2 Objectives and Issues

Assessing airport needs and filing a new plan is often a complex and difficult, but beneficial task. Some basic questions are:

1. Which airport services are the most attractive to new business and existing users and why?
2. What will it cost to get additional airport infrastructure in place?
3. What kinds of visitors or companies are likely to be interested in the airport?
4. What will the basic needs for the airport be, now and in the future?
5. How might the airport benefit its community by attracting businesses that provide higher income jobs and quality goods and services?

Answers to the above questions will help guide the community to establishing an airport plan and program that contributes to achieving community goals. It often boils down to economic development efforts, and how a community or region uses its resources, including the airport, to achieve its community and economic development goals.

A primary aim of this effort is to evaluate and develop concepts and overall recommendations for the Erie Municipal Airport that will facilitate implementation and are workable.

1.2.1 Objectives

This airport master planning process is intended to be an integral part of the community's overall plan. Coordinated planning that enhances the Airport, the Town, and all three counties is an overall aim. Specifically, the objectives of this study are as follows:

Objective Number One:

Comply with FAA design standards.

Objective Number Two:

Maximize development opportunities.

Objective Number Three:

Be environmentally-responsive.

Objective Number Four:

The Master Plan for EIK and surrounding properties should be integral to the existing operations and facilities.

Objective Number Five:

Future development of the airport should contribute to the image and commercial activity of the airport.

Objective Number Six:

The development of the airport and associated properties should occur in a coordinated and comprehensive manner, to take maximum advantage of the assets of the Town and associated Counties.

Objective Number Seven:

The planning and development of the airport should be oriented to achieve the *highest and best* use of the site. Specific users and uses should be evaluated on a case-by-case basis. *Highest and best use* should be interpreted in terms of the following factors: use of physical site assets, economic benefit, jobs created and salaries, fiscal impact and contribution to the overall objectives of the Town.

Objective Number Eight:

The Airport Master Plan should be flexible to accommodate a range of potential aviation uses and non-aviation users.

Objective Number Nine:

Regional economic goals should be an important consideration in preparing a development strategy for the airport.

Objective Number Ten:

Airport development should be evaluated relative to both long and short-term costs and benefits.

Objective Number Eleven:

The Airport Master Plan should minimize off-site impacts, particularly those affecting surrounding, neighboring areas.

1.2.2 Issues

The Town completed a formal Airport Master Plan process in 2003. The Federal Aviation Administration (FAA) and the Colorado Department of Transportation (CDOT) determined that an update to the plan would be beneficial given current activity and economic conditions. The Town of Erie consulted with FAA, CDOT and the airport master plan consultant to consider



current potential issues and craft a work plan which addresses resolution. Some of those issues are described as follows and will be given particular attention through the planning process.

Issue Number One:

Identify/Address TTF issues

Both residential and commercial through-the-fence are important to the future of the Erie Municipal Airport. Through-the-fence (TTF) is simply accessing the airfield-proper via privately-owned property. The Town of Erie has accepted federal government grant assurances which instruct the conduct of airport business and operations. Existing and future TTF access/procedures needs to be coordinated with FAA and CDOT to ensure grant assurance compliance.

Issue Number Two:

Protect Airspace/Dispose of Obstructions to Navigable Airspace

The grant assurances discussed above also relate to maintenance of sufficiently clear airspace for unobstructed aircraft operations at the Erie Municipal Airport. Clearance for existing airspace will be addressed along with and potential future airspace needs. Future airport improvements may expand the airport's airspace and require coordination with various constituencies.

Issue Number Three:

Ensure Runway 15-33 Length Adequacy

This issue, and issues number four and five, are somewhat related and have the potential to change the aviation dynamics at the Erie Municipal Airport. In general, and as discussed in the next chapter, airports and runway lengths are designed around the airplanes that use them. Now and/or in the future, a sufficient quantity of runway length demanding aircraft may use the airport in a quantity to suggest an increase in runway length.

Issue Number Four:

Identify Runway 15-33 Design Standards/Ensure Adequacy

Similar to the runway length adequacy concern of the previous issue, a sufficient number of aircraft may now, or in the future use the airport to suggest a modification of the airport's design standards, including pavement strength, widths and other physical, on-the-ground features.

Issue Number Five:

Ensure Runway 15-33 Instrument Approach Capability Adequacy

An instrument approach procedure is an FAA-defined three-dimensional path in the sky which allows safe aircraft operation to the airport during some periods of inclement weather. The airport master plan process will consider improved and or additional instrument approach procedures at the Erie Municipal Airport. The primary consequence of improved instrument approach procedures is realization of a more all-weather airport.

Issue Number Six:

Identify/Address Crosswind Runway 9-27 Needs/Issues

Historical Runway 9-27 was decommissioned a number of years ago by the Town due to design standards inadequacies and poor pavement conditions. FAA design standards suggest that if winds favor an east-west runway alignment then planning should be done.

Issue Number Seven:

Identify/Address Landside Needs

This final issue is somewhat of a catch-all for other issues. Landside in this context relates to portions of airport ramp/aprons, the terminal building function/location, aircraft fueling and other services provided to the flying public, automobile access and parking, and other



important features which serve to support the airside of the Erie Municipal Airport.

1.3 Planning Process

A planning process is primary and accompanies this narrative. This planning process and participation through the process from those with interests in the overall aviation community is important to creation of this narrative.

The planning process begins with preparation of the necessary data and mapping to be used in the study to prepare this narrative along with its Airport Layout Plan (ALP) drawings for the Erie Municipal Airport.

The narrative and ALP drawings will be prepared in accordance with FAA guidelines, policies and procedures and applicable federal and state laws and standards. Previous reports and associated work will be reviewed, as necessary.

The project process will be engaged in full coordination with the AMAG, federal, state and local planning agencies, the representatives of which will be consulted for input and invited to attend progress meetings, public meetings or other meetings associated with the process. The end result will provide a planning document that recommends a responsive course of action and a scheduled plan, complete with current cost estimates for facility improvements.

Prior to initiation of this project, the prerequisite project scope of services, budget and schedule were approved. The planning process and its project workflow consist of four project phases, described as below and as depicted on the project workflow exhibit within Appendix A.

1.3.1 Project Participants

The Town Board of Trustees will make final decisions about the future of the Erie Municipal

Airport through the course of the master planning process.

Various airport constituencies, including the general public, and the nearby home and business owners will be consulted through the public participation process.

Mr. Jason Hurd, Airport Manager, is the primary information conduit for the master plan consultant. Town of Erie staff, not limited to those professionals in Public Works, Planning and Zoning, Community Development and Economic Development will advise and consult at key project points.

FAA will approve master plan forecasts and internally circulate the master plan for integration in the national airspace system. FAA and CDOT will advise on project progress and documents at key project points.

The airport master plan consultant, Airport Development Group, Inc., will prepare project documentation, guide project progress, solicit guidance, and work to build consensus from plan participants at key project points.

1.3.2 Project Phase One

The master planning process benefits from public participation and as such, a project initiation meeting for the general public, per **Meeting Series No. 1**, is a first step. This public meeting was held on November 28, 2012 at the Erie Community Center. Prior to this meeting the AMAG, Town Staff and Town Board of Trustees were briefed on the project work scope.

Phase One project activities then continue with the drafting of **Chapter Two**, Inventory and **Chapter Three**, Forecasts of Aviation Demand. Efforts associated with Chapter One involve

information acquisition not limited to; facilities and improvements, survey, land uses, airspace and navigational aids, along with socioeconomic, environmental and financial data. Efforts associated with Chapter Two include formulation economic and activity projections culminating in various aviation forecasts specific to the first five-year period; 2014-2018, the second five-year period 2019-2023, and the final 10-year period; 2024-2033, of the 20-year planning horizon.

FAA and CDOT will review these chapters and provide comment, resulting in **Working Paper No. 1**, and the initiation of **Meeting Series No. 2**. Comments will be solicited and addressed from the AMAG and Town staff prior to a second working session with the Town Board of Trustees to discuss the first Working Paper and conclude the second meeting series.

Select Phase One documentation for Meeting Series No. 1 and 2 is found in Appendix A and B, respectively.

1.3.4 Project Phase Two

The planning process then moves to Phase Two with FAA approval of the Forecasts of Aviation Demand.

Facility Requirements and Capacity Analysis, **Chapter Four**, can then be created based upon previous work. Efforts associated with Chapter Four involve determination of the Erie Municipal Airport's role and service capabilities along with airside and landside requirements and an appraisal of grant assurance compliance and airport security requirements. **Chapter Five**, Alternatives Analysis will consider various airfield and landside alternatives which may suit demand over the three planning periods for Trustee consideration.

FAA and CDOT will review Chapters Four and Five and provide comment, resulting in **Working Paper No. 2**, the second project milestone. Comments will be solicited and addressed from the AMAG and Town staff, including Planning and Zoning, prior a second session with the Town Board of Trustees to discuss the second Working Paper. These consultations constitute initiation of **Meeting Series No. 3**. This meeting series concludes with an open house to be conducted at the Erie Community Center followed by a Town Board of Trustees working session.

Town Board of Trustees selection of alternative(s) is the most crucial and important step in the creation of this the master plan and execution of its process, and its third milestone.

Select Phase Two documentation for Meeting Series No. 3 will be found in Appendix C.

1.3.5 Project Phase Three

The airport master plan process then moves to Phase Three with Town Board of Trustees selection of the preferred alternative(s) or modification thereof.

Phase Three work includes creation of **Chapter Six**, Phased Development and Cost Estimates which sequences and provides cost estimates for airport improvements pursuant to the preferred alternative(s) and **Chapter Seven**, Airport Layout Plan and Drawings which depict existing and future airport features per FAA's Airport Layout Plan checklist.

FAA and CDOT will review these chapters and provide comment, resulting in the **Pre-Draft Airport Master Plan**, and the initiation of **Meeting Series No. 4**. The pre-draft narrative will describe and illustrate the recommended

course of action, over the next 20 years, per Town of Board Trustees direction. Comments will be solicited and addressed from the AMAG and Town staff, including Planning and Zoning, prior a pre-draft master plan session with the Town Board of Trustees to discuss the pre-draft master plan.

When FAA, CDOT, AMAG, Town Staff and Town Board of Trustees comments and prerogatives have been sufficiently addressed, Phase Three will conclude, with a **Draft Airport Master Plan**, the fourth project milestone.

Select Phase Three documentation for Meeting Series No. 3 will be found in Appendix D.

1.3.6 Project Phase Four

The airport master plan process then moves to its final phase with Town Board of Trustees approval of the Draft Master Plan.

From there, the master plan narrative and drawings are somewhat turned over to FAA for coordination. Coordination or 'airspace', is an FAA internal, multi-jurisdictional, 3-month process consisting of an internal review process wherein deliverables are reviewed for continuity and conformity to FAA standards and specifications, and principal changes to the airport are included in the national airspace system.

The fifth and final project milestone is Trustee concurrence with the **Final Airport Master Plan**.

Upon coordination completion, a number of final documents will be printed signed by all parties and the project finalized.

1.4 Consultant Agreement and Study Documentation

The Town of Erie entered into an agreement with Airport Development Group, Inc. in August 2012 to conduct the master planning effort and to prepare this document.

1.4.1 Reference Documents

This study is prepared in accordance with these FAA advisory documents:

- Previous Airport Documents (Various Years)
- CDOT Airport System Plan
- 150/5060-5 *Airport Capacity and Delay*
- 150/5190-4 *A Model Zoning Ordinance to Limit Height of Objects around Airports*
- 150/5070-6 *Airport Master Plans*
- 150/5190-5 *Exclusive Rights and Minimum Standards for Commercial Aeronautical Activities*
- 150/5300-13 *Airport Design*
- 150/5340-1 *Standards for Airport Markings*
- 150/5340-18 *Airport Sign System Standards*
- 150/5300-16 *General Guidance and Specifications for Aeronautical Surveys*
- 150/5300-17 *General Guidance and Specifications for Aeronautical Survey Airport Imagery Acquisition and Submission to NGS*
- 150/5300-18 *General Guidance and Specifications for Submission of Aeronautical Surveys to NGS; Field Data and Collection and GIS Standards*
- 150/5360-9 *Planning and Design Guidelines for Airport Terminal Facilities at Non-Hubs*
- 150/5360-13 *Planning and Design Guidelines for Airport Terminal Facilities*
- 150/5020-1 *Noise Control and Compatibility Planning for Airports*
- 150/5320-5 *Airport Drainage*
- 150/5050-4 *Citizen Participation in Airport Planning*
- 150/5230-4 *Aircraft Fuel Storage, Handling and Dispensing on Airports*

- 5100.38C *Airport Improvement Program Handbook*
5050.4B *NEPA Implementing Instruction for Airport Actions*
1050.1E *Environmental Impacts; Policies and Procedures*
Environmental Desk Reference for Airport Actions

1.4.2 Narrative Report Content

This narrative report presents these chapters:

- Chapter 1 Introduction
Chapter 2 Inventory
Chapter 3 Forecasts of Aviation Demand
Chapter 4 Facility Requirements and Capacity Analysis
Chapter 5 Alternatives Analysis
Chapter 6 Phased Development and Cost Estimates
Chapter 7 Airport Layout Plan and Drawings

These ALP Drawings are found in Chapter Seven:

- Cover and Index
Exhibit I Airport Layout Plan
Exhibit II Terminal Area Plan
Exhibit III Airport Airspace Plan (Part 77)
Exhibit IV Runway 15-33 Approach Surface Plan and Profile
Exhibit V Runway 15 Inner Portion of Approach Surface Plan and Profile
Exhibit VI Runway 33 Inner Portion of Approach Surface Plan and Profile
Exhibit VII Off-Airport Land Use Plan
Exhibit VIII On-Airport Land Use Plan
Exhibit IX Airport Property Map (Exhibit A)

Chapter Two

Inventory



Chapter Two – Inventory

2.0 Introduction

This chapter is intended to provide background information and an inventory of the Erie Municipal Airport and its environs. Quality, relevant baseline information in this regard is necessary for plan integrity.

Data herein was obtained from investigation and interviews, consulting firm experience with the airport and its projects along with Town staff guidance, FAA input, CDOT consultation, along with various other governmental agencies and websites.

The Erie Municipal Airport (EIK) is owned, operated, and sponsored by the Town of Erie, Colorado and managed and guided by Mr. Jason Hurd, Airport Manager.

2.1 Brief Area History

Prior to the 1870's and the development of the northern coal fields, settlers living along Coal Creek scratched out their living as farmers or merchants. The few communities existing along the Front Range were miles apart by stagecoach or horseback.

Throughout the 1860's, stagecoach companies delivered freight, mail and passengers to destinations along the foothills. The Overland Stage traveled from Denver to Laramie each day, following much the same route as the present US Highway 287. Contact with distant friends and relatives improved with the coming of the railroad to Erie in 1871. Even after its arrival, however,

travelers heading to Longmont had to continue on by stagecoach or spring wagon. Those bound for Boulder detrained at the Erie terminal and boarded a stage for the final destination.

Social interaction among early settlers was limited, and families traveled great distances to attend church, school or grange meetings. Many relied on circuit-riding preachers to bring them the gospel once or twice a month. Such a man was Reverend Richard Van Valkenburg, civic leader and a founder of Erie, Colorado. Having spent many years as a Methodist preacher in the coal towns near Erie, Pennsylvania, the Reverend thought it fitting to bestow that name on its western counterpart.

The original plat for Erie was filed in 1871, following establishment of the Briggs Mine, the first commercial coal mine in Weld County. Until that time, surface coal had been delivered to its customers by horse and wagon.

It was also in 1871 that the Union Pacific Railroad extended a spur westward from Brighton on its main line between Denver and Cheyenne. Coal from the Erie deposits was needed to fuel their huge steam locomotives. The Boulder Valley Railroad, as it was called then, opened up the northern coal fields for development. Soon coal from Erie mines was being shipped by rail to markets in Denver and as far east as Kansas City.

The Town of Erie was incorporated in 1874. This brief area history is via the Town of Erie.



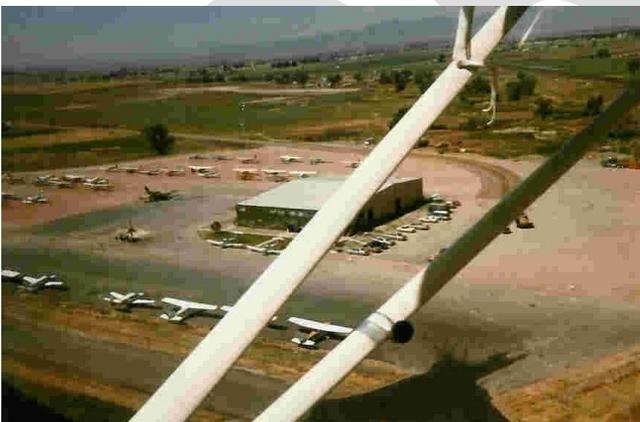
2.2 Brief Airport History

Around 1976, land for the Erie Municipal Airport was purchased and developed by Mr. Tom Pierce and his business partners. They envisioned a private airport and wanted to sub-divide and sell a few lots to help pay for the project. The



property was annexed into the Town of Erie, and properties began selling in 1977.

As these activities began, Pierce and his business partners saw a need to open the airport to the



public to gain support for the maintenance shop, fuel sales and flight school that soon became a major part of the operation. A main hangar with offices, a maintenance shop, a flight school and a fuel island were in place by 1978, the Fixed Base Operator (FBO) origins. A grand opening was well advertised.

The building of homes began in 1977 and 1978. Several lots had sold, and residents began planning and building their airpark homes. But, in the late 70's home mortgage interest rates hit a high range of 16 to 18 percent and building came to a halt. Before rates again became reasonable, Erie had to put a moratorium on water taps, since they didn't have enough water to service this new community.

In 1980, before the water moratorium, Pierce and partners bought a Convair 990, moved it to the airport and perched it on tall pillars. At least 14 vehicles were required to move the parted-out Convair from Stapleton Airport. It took all day for the transport. Pierce built a structure underneath the aircraft and leased the building as a restaurant operation. The restaurant opened as *BJ Strawberries at the Convair*. In March 1981, Pierce and his mechanic friend perished in a plane crash just two months after the Convair's grand opening. Ownership and management of the airport then passed to his wife, Carolee, and



then his son Tom, Jr.

After interest rates returned to reasonable levels, Erie further developed the water treatment plant and home building began again. By 1987 the subdivision began taking shape.



AirPark residents had paid into a maintenance fund since 1979, but it wasn't enough money to fully maintain the blacktop runways. Pierce, Jr. and others convinced the FAA that the airport should become a reliever, and FAA concurred and made the designation. This status gave the airport the ability to obtain FAA and CDOT grant money for the first runway rehabilitation. As a privately-owned airport, property taxes were assessed, representing a huge bill every year, and the owner was not able to generate sufficient funds to pay the matching costs for the runway rehabilitation. In 1991, the airport fell into bankruptcy.

After several years, the Convair was empty and deteriorating. In 1996, cranes lifted it off its pillars so it could be hauled away for scrap. The building was later remodeled into an office building, still in use today.



In 1994, the Town of Erie purchased the airport. The Town contracted for an FBO manager who paid rent to the Town for the FBO building. In four years, the Town had the bankruptcy court paid in full with proceeds from the rent, and the town named the airport the Erie Municipal/Tri-County Airport.

The Erie Airpark Homeowner's Association (HOA) was formed in 1979 to enable a dialogue to develop between the residents, the then airport owner, and the Town of Erie. Original membership in the HOA was optional, dues were \$20.00 per year per family, and meetings were held once a month.

Several business have come and gone at EIK over the years, but Rocky Mountain Propeller remains stalwart with a 20-plus year history at EIK. Historical Fixed Base Operations have come and gone as have former Airport Managers. Vector Air, the current FBO and Management company employs administrative and airframe and powerplant professionals and provide the full suite of FBO service for the flying public.

The Tri-County Pilot's Association was formed in 1993, and is still active, with a new name; the *Friends of Erie Airport* (FOEA). FOEA formed in order to support and represent the airport while working with the FAA, the Town of Erie and the surrounding neighbors. An Erie Airport Economic Development Committee was formed in 2008 to encourage businesses to develop on or near airport property. In 2010, businesses on or near, with access to the airport numbered approximately 30 to 35, with 150 to 160 employees. These businesses support the airport and add to the economy of the Town of Erie with jobs, payrolls, sales and property taxes, and airport access fees.

The *Spirit of Flight Museum* opened in 2005. This facility offers a truly unique environment that combines vintage and corporate aviation while promoting the love of flight. Hundreds of rare aviation items and artifacts are on display in the Spirit of Flight Hall of Honor representing the past, present and future of flight. The Spirit of Flight mission is to save and display aircraft and



flight memorabilia to honor all veterans, and to educate the general public on the significance of aviation and aviation history. The Spirit of Flight Museum sponsors an open house annually with other events throughout the year.



Aero Systems is near the Museum and has been doing contract work across the nation for a number of years.

Community Involvement

Every May the airport, with the help of select airport groups participates in *Erie Air Fair Days*. For a number of years, this event's balloon launch was from the airport until it was relocated to a nearby location. FOEA and HOA provides a pancake breakfast and lunches, static airplane displays and participates in the Erie down town fair with a booth and displays. In conjunction with the Experimental Aircraft Association (EAA,



Chapter 43), pilots give *Young Eagle Rides* at the *Air Fair*, plus every few weeks all year long.

Various airport businesses sponsor safety seminars as well as open house days for nearby residents of Erie and surrounding communities. The current FBO sponsors pilot safety seminars throughout the year with speakers who provide safety programs for area pilots.

Economic Impact

The Colorado Department of Transportation, Division of Aeronautics publishes their findings of airport specific economic impact. In 1998, CDOT's report indicated Erie had a positive economic impact of \$3,395,200, with total earnings of \$936,000, along with 42 total jobs. By 2008, the report indicated Erie Municipal Airport's total impact of \$12,224,700, total earnings of \$4,345,300, and a total of 160 jobs.

The platted Erie Air Park has 140+ homes along with some vacant lots. Property taxes and fees provide support for the Town of Erie, Weld County and St. Vrain Valley School District, the Library District, Water and Sewer Districts, bond repayments for the Erie Community Center, as well as aviation fuel taxes and airport access fees to help support EIK's enterprise fund.

Note that the preceding description of select history and images are courtesy of the Colorado Airport History Preservation Project as administered by Dr. Penny Hamilton, and as described by longtime EIK pilot and homeowner, Ms. Beverly Cameron.

2.3 Airport Role

This planning effort is intended to instruct and supplement state and federal airport planning efforts. This plan is a more detailed look at EIK, while national and state planning step back somewhat and generally consider the role EIK plays in the overall system of federal and state airports.

Table 2-1
 Colorado State System Plan (2011)
 Performance Benchmarks for Erie Municipal Airport

Performance Measure	Compliance	Description
Activity	Yes	Within 38% of forecast ultimate airspace capacity
Expansion Potential; Planning	No	Master Plan desirable
Expansion Potential; Part 77	No	Zoning in place for FAR Part 77 surface protection
Economic Support; IAPs	Yes	IAP established (Circling)
Economic Support; Fuel	Yes	Jet A and 100 LL fuels available
Economic Support; Autos	Yes	Courtesy, taxi/shuttle, car rental available
Economic Support; \$	Yes	economic impact greater than \$1 million
Access/Emergency; AWOS	Yes	AWOS on-field
Access /Emergency; Emergency	No	Sufficient emergency runway length available (4,800')
Access /Emergency; Length	Yes	Sufficient minimum runway length available
Investment; Runway Length	Yes	4,630 feet minimum (75% of small aircraft)
Investment; Runway Width	No	75 feet wide minimum
Investment; Runway Strength	Yes	12,500 pounds single-wheel minimum
Investment; Taxiway	Yes	Full/partial-parallel, connectors or turn-arounds
Investment; IAP	Yes	Non Precision IAP available
Investment; Visual Aids	Yes	Beacon, Windcones, PAPI, REIL, Segmented Circle
Investment; Runway Lighting	Yes	MIRL installed
Investment; Apron Lighting	Yes	Apron lighting in place
Investment; AWOS	Yes	AWOS on-site
Investment; Service	Yes	Phone, restroom, car and fuel on-site
Investment; Equipment	Yes	Tractor, mower, snow removal, electrical vault, paint machine, airfield maintenance vehicle
Investment; Airfield Pavements	Yes	Runway, Taxiway and Apron rated 84, 99, 86 out of 100, respectively (as of 2/15/2011)
Security	No	Signage, documented security procedures, positive ID, aircraft secured, community watch program, contact list, formal law enforcement support, security committee, transient pilot sign-in/out, access control, lighting system, personnel ID system, vehicle ID system, challenge procedures

2.3.1 Federal Planning

EIK is part of the US national transportation system, and part of the Federal Aviation Administration's National Plan of Integrated Airport Systems (NPIAS). Of the nation's nearly 5,200 public-use airports, the NPIAS comprises nearly 3,400 airports which are considered, by FAA, significant to the capacity and integrity of the national airspace system.

Because of NPIAS participation, the Town of Erie, as sponsor is eligible, and has received federal funding for airport improvements under the Airport Improvement Program (AIP). Funds to pay for NPIAS improvements originate with the AIP program. AIP is a user-fee based program, funded through the Airport and Airways Trust Fund as originated through the Airport and Airway Improvement Act of 1982, as amended. This grant-in-aid program provides the funding to execute most federal, state and local airport



planning. This planning effort, along with planning done by CDOT may be used to consider the quality and quantity of EIK's participation in the NPIAS.

The current NPIAS (2013-2017) identifies the airport as a public use, local (as opposed to *basic* service, *regional* service or an airport of *national* importance), with 173 based aircraft and \$2,131,579 of anticipated development needs for eligible improvements. The NPIAS no longer designates EIK as a reliever to Denver International Airport.

2.3.2 State Planning

EIK is eligible to receive funding through CDOT and other state agencies. The *Colorado Airport System Plan Update* (revised 2011) identifies EIK as an *intermediate* (as opposed to *minor* or *major*) airport in the Colorado system. Table 2-1 notes system plan performance objectives for EIK per that document. In addition, the *Plan* notes that 160 aircraft based at EIK in 2008, and \$4,345,300 of wages, and \$12,224,700 of economic activity were generated in that same year. The *Plan* notes that 179 aircraft based at EIK in 2010, along 67,500 general aviation operations that same year, ranking number 6 and 9 in the state, respectively.

Figure 2-1 depicts the *Colorado Airport System Plan Update* map of airports.

CDOT occasionally performs inventories of airfield pavement conditions at various airports, including EIK. CDOT's 2011 pavement management system effort identifies the following numerical reference index ranges:

- Ongoing Maintenance (100-62±)
- Major Rehabilitation Needed (±62-41)
- Major Reconstruction Needed (40-0)

And 2010 EIK conditions:

- Runway 15/33 (84)

- Taxiway A (99)
- Apron (86)
- Connector Taxiway A1 (95)
- Connector Taxiway A2 (100)
- Connector Taxiway A3 (100)
- Connector Taxiway A4 (100)
- Connector Taxiway A5 (97)

Along with a 2015 forecast of conditions, assuming that no improvements will be made:

- Runway 15/33 (76)
- Taxiway A (92)
- Apron (82)
- Connector Taxiway A1 (90)
- Connector Taxiway A2 (93)
- Connector Taxiway A3 (97)
- Connector Taxiway A4 (97)
- Connector Taxiway A5 (91)

CDOT occasionally performs an analysis to estimate the economic impacts of Colorado airports. The 2008 effort in this regard indicated that EIK supported 160 jobs, \$4,345,300 of total payroll, and \$12,224,700 of total output. Findings indicated that five percent (6,335) of EIK's 73,660 general aviation operations are transient, resulting in an average of 3.44 visitors per aircraft arrival. \$178.41 in per person/trip expenditures were estimated, resulting in an annual total visitor expenditure value of \$1,130,185. This study is expected to be updated in the near future and this chapter will be updated when those data become available.

2.3.3 Previous Airport Planning

The most recent airport planning document on file is an Airport Master Plan update dated February 7, 2002. That narrative and its Airport Layout Plan (ALP) drawing provided the matter-of-course planning analyses including identifying a number of non-standards conditions and obstructions to navigable airspace, development alternatives and a recommended course of action per a series of phased improvements. Table 2-2 identifies historical FAA and CDOT grant-in-aid.

Table 2-2
Historic EIK Grants

(Source: FAA/CDOT)

CDOT Grants	Description	Local Share	Federal/Other	State	Total
1995-EIK-001	Acquire Truck	\$ 4,200	\$ 0	\$ 20,000	\$ 24,200
1997-EIK-001	Upgrade Fuel Farm	\$ 3,800	\$ 0	\$ 34,200	\$ 38,000
1999-EIK-001	Taxiway Reflectors/Remark/Master Plan Match	\$ 7,700	\$ 66,600	\$ 19,700	\$ 94,000
2000-EIK-001	Pavement Maintenance/Fuel Project	\$ 25,000	\$ 0	\$ 17,600	\$ 42,600
2002-EIK-001	Construct Access Road and Parking	\$ 16,666	\$ 300,000	\$ 16,666	\$ 333,332
2003-EIK-001	Taxiway Construction Match	\$ 9,585	\$ 172,537	\$ 7,668	\$ 189,790
2005-EIK-001	Taxiway Construction Sponsor Match/Install AWOS	\$ 43,737	\$ 750,000	\$ 115,737	\$ 909,474
2006-EIK-001	Terminal and Hangar Repair Sponsor Match	\$ 7,895	\$ 300,000	\$ 7,895	\$ 315,790
2007-EIK-001	Terminal Repair Sponsor Match, Remark Airfield	\$ 17,500	\$ 300,000	\$ 17,895	\$ 335,395
2008S-EIK-001	New Beacon/Pavement Maintenance on Ramp	\$ 6,400	\$ 0	\$ 25,600	\$ 32,000
2009-EIK-002	FAA Lighting Project Match	\$ 3,948	\$ 150,000	\$ 3,948	\$ 157,896
2009-EIK-001	Pavement Maintenance	\$ 30,000	\$ 0	\$ 120,000	\$ 150,000
2009-EIK-00s	Supplemental	\$ 0	\$ 0	\$ 7,895	\$ 7,895
2010-EIK-001	Fuel System Upgrade and Pavement Maintenance	\$ 56,288	\$ 237,236	\$ 206,604	\$ 500,128
2011-EIK-001	Connector Taxiway Match	\$ 45,064	\$ 150,000	\$ 372,800	\$ 567,864
2011-EIK-00s	Supplemental	\$ 0	\$ 0	\$ 27,200	\$ 27,200
2012-EIK-001	Master Plan Update Match/Runway Repair, Signage	\$ 47,952	\$ 150,000	\$ 400,000	\$ 597,952

FAA Grants	Description	Entitlement	Discretionary	Total
001-1990	Rehabilitate Runway	\$ 0	\$ 886,927	\$ 886,927
001-1990	Rehabilitate Taxiway	\$ 0	\$ 350,000	\$ 350,000
001-1990	Install Apron Lighting	\$ 0	\$ 35,000	\$ 35,000
001-1990	Acquire Land for Development	\$ 0	\$ 68,720	\$ 68,720
002-1993	Construct New Airport	\$ 0	\$ 793,298	\$ 793,298
002-1993	Conduct Airport Master Plan Study	\$ 49,999	\$ 0	\$ 49,999
003-1997	Rehabilitate Apron	\$ 814,813	\$ 55,709	\$ 870,522
004-1999	Conduct Airport Master Plan Study	\$ 98,737	\$ 0	\$ 98,737
005-2000	Acquire Land for Approaches	\$ 129,032	\$ 0	\$ 129,032
005-2000	Install Airfield Guidance Signs	\$ 60,000	\$ 0	\$ 60,000
006-2002	Conduct Miscellaneous Study	\$ 10,000	\$ 0	\$ 10,000
006-2002	Improve Airport Drainage	\$ 269,915	\$ 0	\$ 269,915
007-2003	Rehabilitate Apron	\$ 59,020	\$ 0	\$ 59,020
007-2003	Rehabilitate Taxiway	\$ 75,000	\$ 0	\$ 75,000
008-2005	Construct Access Road	\$ 190,154	\$ 0	\$ 190,154
008-2005	Install Perimeter Fencing	\$ 86,065	\$ 0	\$ 86,065
008-2005	Construct Taxiway	\$ 338,935	\$ 0	\$ 338,935
009-2009	Rehabilitate Runway Lighting	\$ 173,693	\$ 0	\$ 173,693
009-2009	Construct Taxiway	\$ 175,000	\$ 0	\$ 175,000
010-2009	Rehabilitate Runway Lighting	\$ 150,000	\$ 0	\$ 150,000
010-2009	Construct Taxiway	\$ 159,778	\$ 0	\$ 159,778
011-2010	Rehabilitate Apron	\$ 50,000	\$ 0	\$ 50,000
011-2010	Construct Taxiway	\$ 109,721	\$ 0	\$ 109,721
012-2011	Rehabilitate Apron	\$ 100,884	\$ 0	\$ 100,884
012-2011	Construct Taxiway	\$ 130,924	\$ 0	\$ 130,924
013-2012	Conduct Airport Master Plan Study	\$ 150,000	\$ 0	\$ 150,000



2.4 Airport Inventory

EIK is located within the limits of the Town of Erie, Weld County, along the Front Range in the Denver Metropolitan area. The Airport is found close to the intersection of US Highway 7 and County Line Road near the confluence of Weld, Broomfield, and Boulder counties. EIK is approximately 5, 13 and 25 miles from downtown Erie, Boulder, and Denver, Colorado, respectively. Figures 2-1 and 2-2 provide depictions.

Residential-airpark homeownership is found east of the runway and due west of the runway's southern end. The terminal area is found west of midfield and auto access to the terminal area is via US Highway 7 on Airport Road to auto parking. EIK does not have the typical terminal area configuration with a terminal building and auto parking fronting an apron. Auto parking and the terminal building are separated. Vacant land is currently found northwest of midfield.

EIK is located near 40°00'37" North, 105°02' 53" West. EIK properties currently approximate 115 acres, in Sections 30 and 31. Exhibit E on Page 2-13 provides a depiction of the airport.

EIK is equipped with a rotating beacon atop the main hangar. The rotating beacon alternates green and white, indicating nighttime availability of a public-use, civilian airport. EIK is equipped with an Automated Weather Observing System (AWOS). An AWOS provides real-time local weather information for the flying public. The airport has a segmented circle located near the AWOS, both near midfield on the west side of the runway. The segmented circle indicates traffic pattern, and found within the circle is a lighted windcone displaying wind vector information. A supplemental windcone is found near the south runway end.

2.4.1 Runway 15-33

Runway 15-33 is 4,700 feet long and 60 feet wide. It is constructed of concrete with a 12,500 single-wheel gear (SWG) pavement strength. The wheel (single, double, dual-double) nomenclature refers to a pavement design methodology which produces a pavement strength referenced to the number of wheels on a given aircraft strut. Design inputs in this regard include soil type and other soil characteristics, sub grade/base soil improvements, loading, frequency and mix of aircraft which are expected to use the pavement, pavement type and composition, planned pavement life, and other design criteria. In short, pavements were designed to accommodate a limited number of aircraft operations, over time without substantial surface rehabilitation. It is worth noting that the design allows for a limited number of aircraft operations with weights greater than 12,500 pounds.

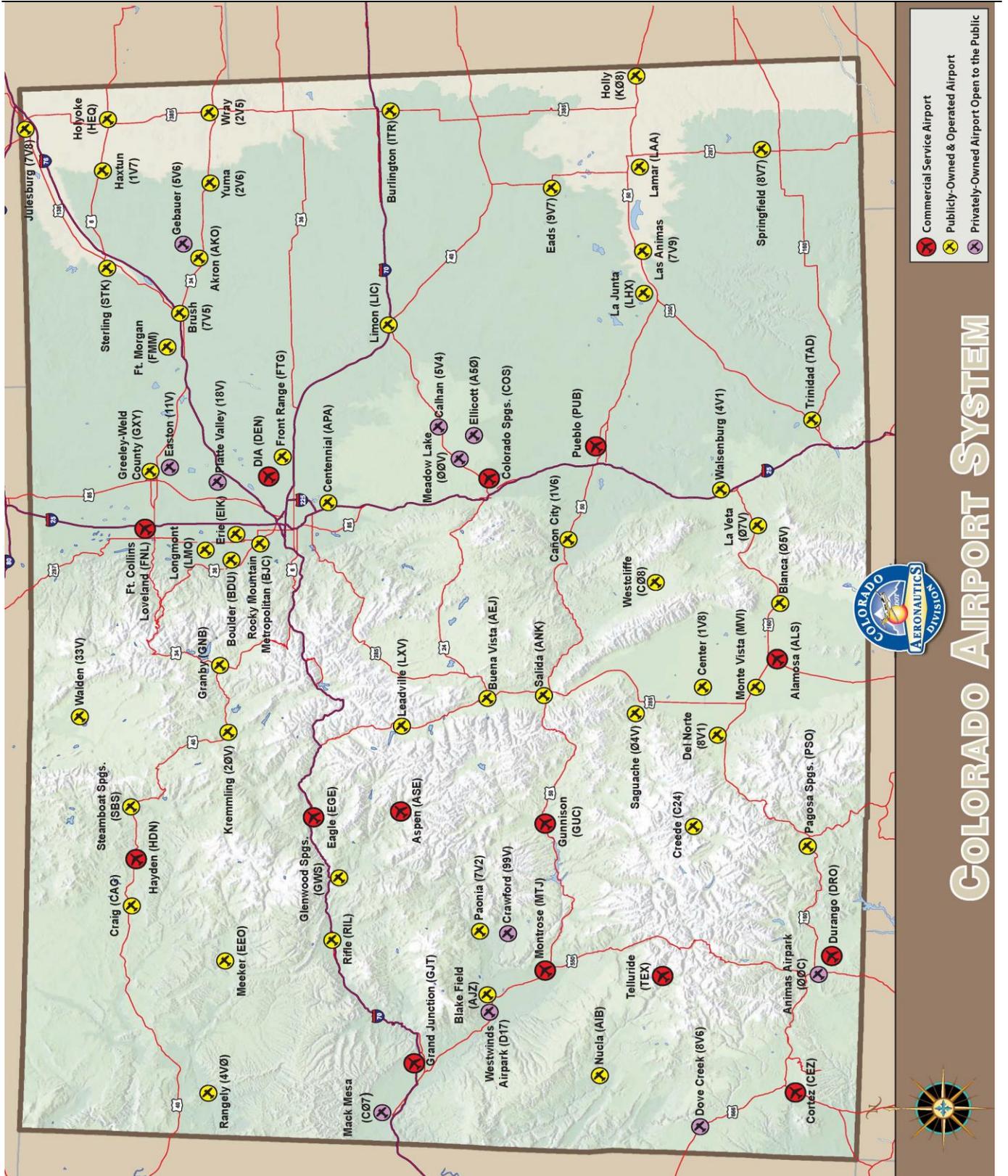
The effective runway longitudinal gradient is 0.9 percent. The Runway 15 elevation is 5072.0 feet above mean sea level (msl) and Runway 33 is 5116.0 msl. FAA design standards require that the effective and the maximum runway longitudinal gradients not exceed certain limits to ensure a runway is not too steep overall or within a shorter distance. Runway longitudinal line of sight is met. Line of sight provides that any two points five feet above runway centerline shall be mutually visible along any one-half of runway length.

Right traffic is established for Runway 15 operations and left traffic to Runway 33. Aircraft generally use all or portions of a rectangular flight pattern, of which the runway constitutes a portion of one side.



Figure 2-1
Colorado State System Plan

(Source: CDOT)



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Lights are frangibly-mounted (breakable) at the base to avoid substantial damage to the aircraft in the event of a deviation from the runway. The last 2,000 feet in either direction are directionally-lighted amber to indicate runway limits. Runway threshold lights are part of MIRL and are directionally lighted red and green to indicate runway limits.

Both runway ends are equipped with VGSI (Visual Glide Slope Indicator) lighting. The two-light Precision Approach Path Indicator (PAPI-2) is a type of VGSI used to provide lighted, visual information to the pilot as descent toward a runway end is made. The PAPI indicates a red and a white light when on the correct glideslope to either runway end, two red lights when below the glideslope and two white lights when above. The Runway 15 end is equipped with Runway End Identifier Lighting Systems (REILs). REILs are frangibly-mounted flashing lights situated near each runway end. This lighting system facilitates day or night runway end identification, in clear or semi-obscured weather conditions.

Both runway ends are marked with elements appropriate for non precision aircraft operation excluding aiming points. Runway marking elements at EIK include designation (the numbers), centerline, and touchdown zone. Runway markings are generally white.

A wind analysis was conducted as part of this planning. Results indicated that Runway 15-33 does not meet FAA's recommended 95 percent coverage of wind in an all-weather, VFR or IFR conditions. Additional information in this regard is found in Section 2.5.

An Instrument Approach Procedure (IAP) is available for pilots operating at EIK. An IAP is an FAA-designed and prescribed three-dimensional path in the sky for safe aircraft landing. These

paths necessarily avoid terrain, tall towers and other obstructions to allow safe aircraft operation during some periods of inclement weather. Figure 2-3 depicts the IAP.

2.4.2 Taxiways and Apron

Parallel Taxiway A is Runway 15-33's primary taxiway. It is constructed of concrete at 12,500 SWG. It is 25 feet wide and with a 200 foot taxiway to runway centerline separation. Connecting Taxiways A1, A2, and A5 are constructed of concrete (A3, A4 are asphalt) at 12,500 SWG, are 25 feet wide at their narrowest width, marked with holdlines and equipped with signage 125 feet from Runway 15-33 centerline. Aircraft departure staging area is provided at A1 and A5. Taxiway markings are yellow with blue edge markers. A year 2013 taxiway lighting project is planned.

The main apron is constructed of concrete to 12,500 SWG. The apron approximates 31,000 square yards with 48 tiedown positions. The main hangar abuts this apron. Adjacent to and surrounding the main hangar is additional asphalt apron of 27,568 square yards. A portion of this apron at its northwestern extents (4,400 square yards) was recently reconstructed to 12,500 SWG, while the remainder is of unknown pavement strength and in substantially poorer condition. Aircraft parking is no closer than 250 feet to runway centerline. Apron markings are generally yellow with blue edge markers.

2.4.3 Historical Crosswind Runway

The original airport accommodated a second runway, then Runway 9-27. In 2009, the Town of Erie formally notified the FAA of the permanent closure of this runway. This was in response to FAA recommendations that the runway be repaired or closed due to poor pavement and



Several taxiways exist in various states of repair, material composition and widths, nearer to obligated property for east-side airpark residents. Centerline of an east-side nearly full-parallel taxiway is located approximately 150 feet from runway centerline. Hangar homes along the flight line and farther within the airpark access this parallel taxiway. An extension of this taxiway encircles the northern extents of Cessna Drive. Holdlines are found approximately 115 feet from runway centerline on connecting taxiways near the Runway 15 and 33 ends, and at midfield.

Access to those select airpark residents along Baron Court is somewhat different in that a few, but not all lots currently have access to Taxiway A or the apron, individually.

US Highway 7 to Airport Road also accesses EIK's terminal area. The terminal area features the FBO hangar, fueling facilities and the apron along with 20 movable T-hangars and auto parking.

The FBO hangar is original to the airport and approximates 100 feet by 100 feet along with a co-located two-story office space (approximately 3,000 square feet per level), all under one roof. The hangar is approximately 435 feet from runway centerline. Fueling facilities consist of two 12,000 gallon tanks located near the middle of the apron, with 100LL and Jet-A fuels.

Auto parking area approximates 4,200 graveled square yards. These facilities are fenced and gated in the immediate area and constitute on-airport facilities. Airport customers and patrons must park and walk across a taxiway to access the FBO hangar/offices. Vector Air Employees park vehicles behind (north of) the existing FBO hangar.

Vector Air, EIK's FBO provides a full suite of small and larger aircraft general aviation services to the flying public from terminal area facilities.

Other terminal area aviation-related businesses are located adjacent the airport and access the airport via a taxiway that originates on off-airport property. Rocky Mountain Propellers and two hangar complexes are found due west of the terminal area along this taxiway.

Other businesses and the *Spirit of Flight Museum* north of the terminal area, on the west side of Coal Creek, access the terminal area in a similar fashion. These businesses and the museum are located on South Main Street via County Line Road. Aircraft Access is via a newly constructed/aligned taxiway bridge across Coal Creek. Not all businesses are aviation-related.

Under contract with the Town, Vector Air manages the airport, providing routine airfield safety, security and maintenance.

The Town of Erie Police and Mountain View Fire Rescue provide law enforcement and fire/emergency medical services for the EIK and its environs. Xcel Energy provides power.

Aside from the chain-link perimeter fencing partially surrounding the terminal area, no other fencing exists.





Legend

(E)	Existing
---	Existing Property Line
---	Building Restriction Line (BRL)
---	Runway Protection Zone (RPZ)
---	Approach Surface
---	Object Free Area (OFA)
---	Runway Safety Area (RSA)
---	Obstacle Free Zone (OFZ)
---	Section Line
---	Dirt Road
---	Existing Paved Roads
---	Existing Pavement
---	Existing Avigation Easement
---	Threshold Lights
---	Precision Approach Path Indicators (PAPI-2)
---	Segmented Circle With Lighted Wind Cone
---	Rotating Beacon

Airport Data

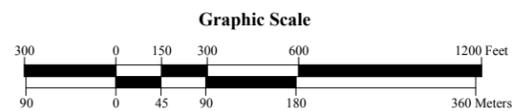
Airport Elevation	Existing 5130.0'
Airport Reference Point (ARP) Coordinates (NAD 83)	North Latitude 40°00'18" West Longitude 105°02'37"
Mean Daily Max Temperature - Hottest Month	88.4° - July
Magnetic Variation (November, 2012)	8°46' East
Airport And Terminal Electronic Navigational Aids	Beacon, VOR/DME, Lighted Wind Cone, Segmented Circle
Percent Wind Coverage (10.5 / 13 / 16 / 20 Knots)	85.71 / 89.8 / 94.05 / 97.31
Airport Approach Category And Design Group	Visual - Utility
NPIAS Service Role	GA
Taxiway Lighting	A - Reflectors
Taxiway Marking	Basic

Structures List

No.	Description
1	FBO Hangar
2	Movable Hangars
3	Rocky Mountain Propellers - Off Airport
4	Hangar Complex - Off Airport
5	Vacant
6	Schofield Hangar Complex - Off Airport
7	Waste Connection of Colorado - Off Airport
8	Gaptor Septic Systems - Off Airport
9	LTS Glass Doors - Off Airport
10	Spirit of Flight Museum - Off Airport
11	Aero Systems - Off Airport
12	Turf Cuts, Trail Ridge Construction - Off Airport
13	Tri-County Heliport - Off Airport
14	?

Runway Data

	Runway 15 / 33
Effective Gradient (In Percent)	Existing 0.95
Percent Wind Coverage (10.5/13/16/20 Knots)	85.71 / 89.8 / 94.05 / 97.31
FAR Part 77 Approach Surfaces (Slope)	(15) 20.1 / (33) 20.1
Instrument Runway	No
Touchdown Zone Elevation (TDZE)	(15) 5095.2' / (33) 5116.67'
Runway Lighting	MIRL
Runway Marking	Non-Precision
Electronic Navigational Aids	Beacon, VOR/DME
Visual Approach Aids	(15) PAPI, REIL, MIRL / (33) PAPI
Runway Length	4,700'
Runway Width	60'
Pavement Type	Concrete
Pavement Design Strength (1,000 lbs)	12,500 SWG
Runway Safety Area Length / Width	5,180' / 120'
Runway Object Free Area Length / Width	5,180' / 250'
Runway Obstacle Free Zone Length / Width	5,100' / 250'
Approach Category And Design Group	A - I (Small Only)
Critical Aircraft	Cessna-150
Approach Speed (Approach Category)	Less than 91 Knots (A)
Wingspan (Design Group)	< 49' (I)
Weight	12,050 lbs
Length Of Haul (Aircraft Over 60,000 lbs)	500 Miles
Taxiway Width	A - 25'
Taxiway Lighting	A - Reflectors
Approach Visibility Minimums	Circling
Runway Maximum Grade (In Percent)	.93
FAA Line of Sight (Longitudinal)	Met
Runway End Elevation	(15) 5072.7' / (33) 5116.7'
Runway High / Low Point Elevation	5116.67' / 5072.7'



No.	Revision	Ckd	Date



ADG DEVELOPMENT GROUP
 1776 South Jackson Street, Suite 950
 Denver, Colorado 80210-3802
 303.782.0882 / 303.782.0842 fax
 www.ADGairports.com

A.I.P. Project Number: 3-08-0090-13-2012
 November 2012

Project No.: EIK1398M
 Designed By: SMP
 Drawn By: MTP
 Approved By: SPM
 Date: November 2012

Existing Airport Layout

Exhibit: **E**

2.5 Environmental

The Town of Erie has made the following environmental stewardship commitment: "In Erie, we have a relentless commitment to maintaining our Town as a great place to live, work and play. That's why sustainability is more than an option here, it's part of daily life. As a result, we're well on our way to becoming a model for eco-friendly civic development with environmentally sound "green" practices."

2.5.1 Airport Area Zoning and Land Use

The Town of Erie has established *Airport (AP)* zoning, per 10-2-5 of the Town Code. Areas near the Runway 15 and historical Runway 9 and 27 ends are designated *Rural Preservation (RP-2)*. Figure 2-1 depicts this zoning per the Town Zoning Map. *Light Industrial (LI)* is found due north of the field, *Rural Residential (RR)* associated with the Airpark, and *Business (B)* southwest of the airfield, along Highway 7. Planned development is found east and northeast associated with the residential Vista Ridge and Vista Pointe planned developments.

The *Airport Overlay (APO)* District overlays all other districts/uses within the area, per Section 10-2-7, as depicted on the next page.

The Town of Erie has accepted Federal funds, and as such, is obligated to comply with certain conditions, known as grant assurances. These assurances, among others, require the Town to enforce compatible land use adjacent the airport and restrict the height of nearby objects. The APO is intended to ensure compliance with these grant assurances. Per APO Section 10-2-7, "the purpose of the airport overlay district is to minimize exposure of residential and other sensitive land uses to aircraft and their potential impacts, including noise, to minimize risks to

public safety from aircraft accidents, and to discourage traffic congestion and incompatible land uses proximate to and within airport influence areas." The district provides for the following within the Airport Influence Area (AIA):

- Disposition of non-conforming uses,
- Height and land use limitations,

And, for the following in the event of application for a change in land use within the *APO* district:

- Review and FAA determination for Part 77
- Imposition of aviation easement
- Disclosure to prospective buyers of AIA

AIA limits, as the Town defines them on the zoning map, extend beyond Town jurisdiction into unincorporated Broomfield County, the City of Lafayette, and unincorporated Boulder County.

A *Floodplain Overlay District (FPO)* associated with Coal Creek is of consequence. Section 10-2-7 states the district's purpose is to "promote the public health, safety, and general welfare, to minimize flood losses in areas subject to flood hazards, and to promote wise use of the floodplain". A primary consequence of this district is exclusion of planned, residential development, and promoting other more compatible uses.

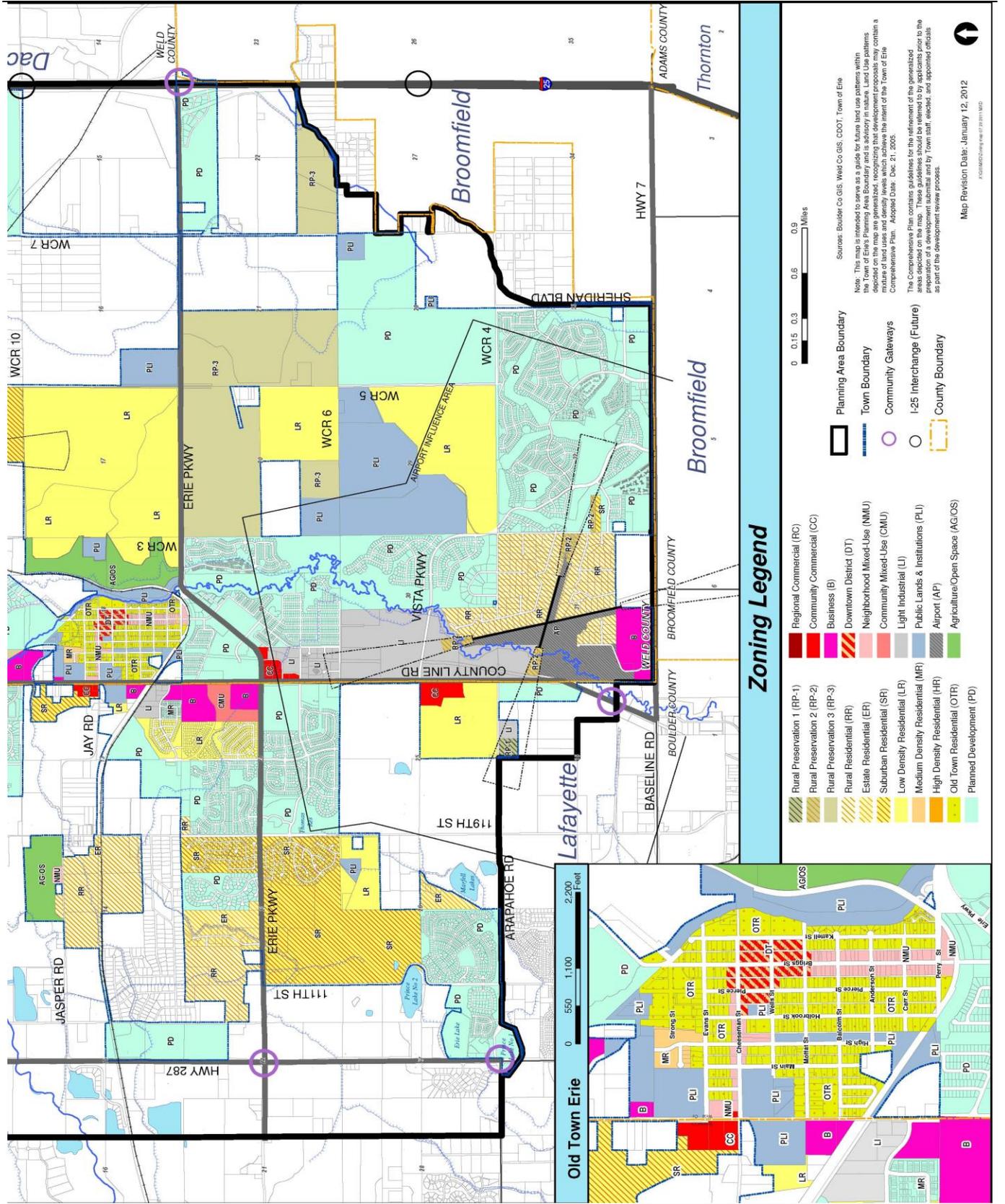
Town Comprehensive Planning

The Town adopted a comprehensive plan in 2005. This document "outlines the community's vision and goals for the future and provides guidance", as an advisory document. EIK, itself, is not substantially addressed within; however, off-airport land uses within the AIA are noteworthy as depicted on Figure 2-4, a depiction of a portion of the Town's future land use map.

Pursuant to and following on from comprehensive planning, the *2008 Erie Transportation Master Plan*, the *2010 Erie Parks, Recreation, Open Space Master Plan* and the *2008 Natural Area Inventory* exist, but do not markedly address EIK.

Figure 2-4
Town of Erie Zoning

(Source: Town of Erie)



ERIE MUNICIPAL AIRPORT



The latter informs habitat as it exists on/near EIK, noting several prairie dog towns, a Swainson's Hawk nest, Burrowing Owl and Tiger Salamander, characterized as *wildlife sites*, along with a rating system for five portions of the Coal Creek Right-of-Way (CCROW) near EIK, characterized as *natural areas*.

The *Open Space Master Plan* specifies that unobstructed, continuous open space, such as the CCROW is identified as high-value for preservation: "The current width and shape and other features of a naturally occurring corridor should be preserved in order to maintain its environmental integrity and avoid creating an engineered appearance."

Notable Portions of Town Code

The Town has spent significant time and effort to accommodate residential and commercial through-the-fence in accordance with FAA grant assurances. Section 2.7.1 specifies (1) An annually-renewable permit and fee for residential access, (2) A multi-year commercial business or commercial non-business access license and fee, (3) Compliance with airport rules and regulations, Airmen regulations and FAA Order 5190.6B (or current at time of license/permit issuance) and other applicable regulations, (4) that the Town may unilaterally modify any provision of or terminate an existing license/permit to maintain FAA grant assurance compliance.

Section 10.6.2B3 specifies that no hangars or buildings should be located within 150 feet of the Coal Creek water course centerline. Section 6.11.4 specifies that aircraft shall use existing easements to access EIK and other *Airpark* properties only if (1) the engine is off and the aircraft is being towed, (2) signage is installed at approved at Town-approved locations, and (3) liability insurance, per the Code, is in force.

City and County of Broomfield

City and County of Broomfield jurisdiction is found south of US Highway 7 in the vicinity of EIK. Zoning in this area is Planned Unit Development, and current land use is a mix of neighborhood residential and open area. Figure 2-5 shows this area, known as Anthem (nearby in green/brown), via a portion of Broomfield's 2005 comprehensive plan land use map. These uses underlay the AIA, as the Town of Erie defines the AIA, *were it* to extend south of Highway 7. Historical Anthem filings seemingly specified no residential land uses underlying Runway 33's historical visual approach surface.

City and County of Broomfield code addresses general aviation airport zoning in Chapter 17-35-030 (F) indicating that wireless facilities/towers shall "meet or exceed current standards and regulations of the FAA". No other substantial or meaningful airport-related code exists.

Boulder County

Unincorporated Boulder County is found west of County Line Road and agriculturally-zoned properties underlay the AIA, as the Town of Erie defines the AIA. The Boulder County code within Article 18-107 specifies height restriction based upon 14 CFR Part 77 protection surfaces. No other substantial or meaningful airport-related code exists.

City of Lafayette

The City of Lafayette annexed a triangular piece of property near the intersection of Highway 7 and County Line Road. The City has identified *Public District (P)* zoning to this property, a non-residential zoning. Primary use is currently water treatment and public services. Other City jurisdictional areas are at distance and do not underlay the AIA, as the Town defines it. The City of Lafayette's code does not address airports.



Figure 2-5

City of County of Broomfield Land Uses

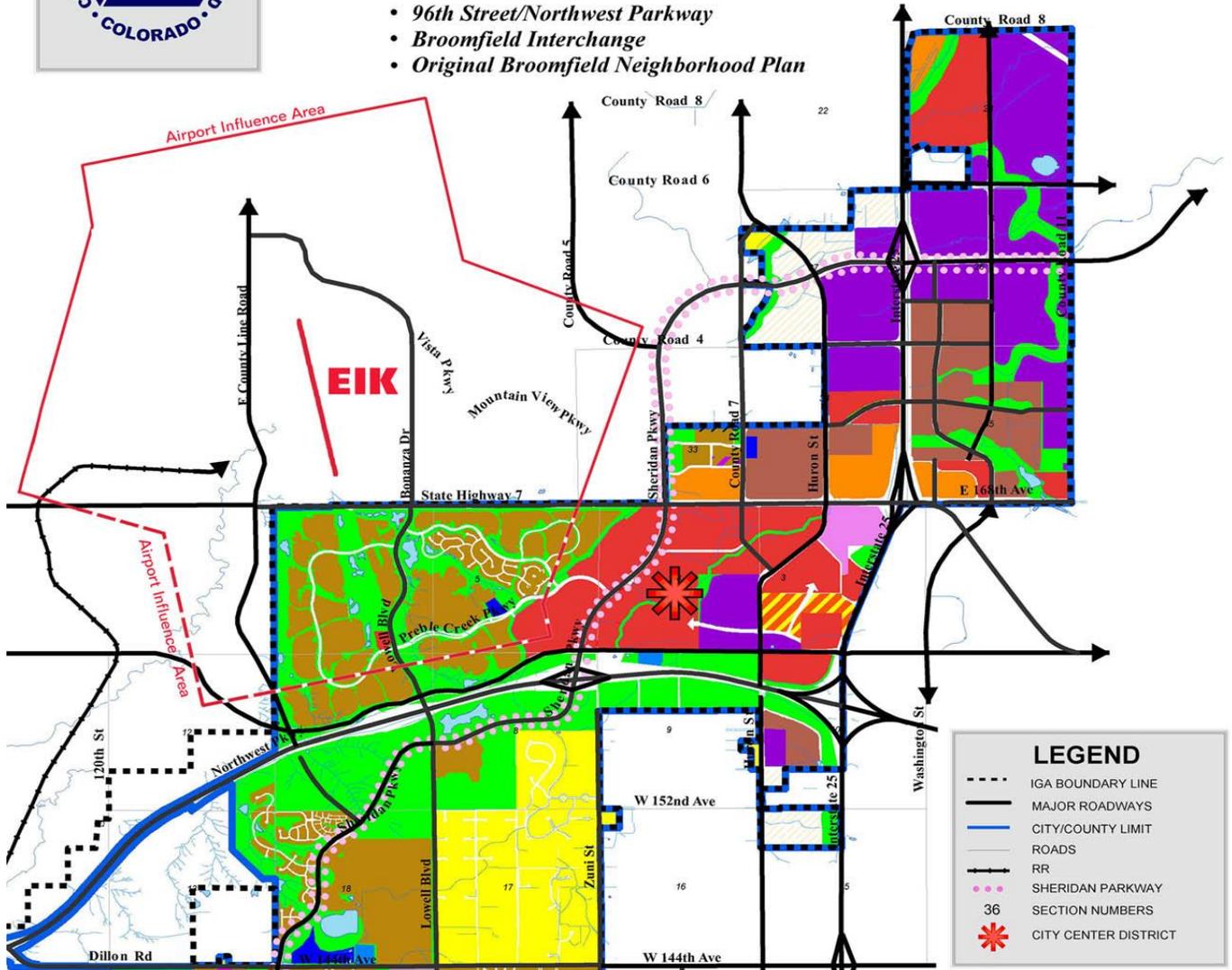
(Source: City and County of Broomfield, select additions in red by ADG)



CITY AND COUNTY OF BROOMFIELD 2005 COMPREHENSIVE PLAN LAND USE MAP

Integrating sub-area plans:

- I - 25
- U.S. 36
- 96th Street/Northwest Parkway
- Broomfield Interchange
- Original Broomfield Neighborhood Plan



LEGEND

- IGA BOUNDARY LINE
- MAJOR ROADWAYS
- CITY/COUNTY LIMIT
- ROADS
- RR
- SHERIDAN PARKWAY
- SECTION NUMBERS
- ★ CITY CENTER DISTRICT

LAND USE DESIGNATION

<ul style="list-style-type: none"> OPEN LANDS - BROOMFIELD/BOULDER COUNTY INTERGOVERNMENTAL AGREEMENT OPEN LANDS TOWN CENTER REGIONAL COMMERCIAL COMMUNITY COMMERCIAL NEIGHBORHOOD CENTER COMMERCIAL/RETAIL NEIGHBORHOOD COMMERCIAL BUSINESS COMMERCIAL MIXED USE COMMERCIAL 	<ul style="list-style-type: none"> MIXED USE OFFICE/FLEX LIGHT INDUSTRIAL TRANSIT ORIENTED DEVELOPMENT TRANSIT ORIENTED DEVELOPMENT/park-n-ride EMPLOYMENT/ MIXED USE COMMERCIAL EMPLOYMENT/ TRANSITIONAL RESIDENTIAL EMPLOYMENT EMPLOYMENT OR NEIGHBORHOOD RESIDENTIAL URBAN RESIDENTIAL NEIGHBORHOOD RESIDENTIAL 	<ul style="list-style-type: none"> RURAL RESIDENTIAL RURAL RESIDENTIAL/CONSERVATION EASEMENT PUBLIC/COMMUNITY FACILITY SCHOOL MIXED USE COMMERCIAL/RESIDENTIAL AGRICULTURE/CONSERVATION EASEMENT TRANSITIONAL RESIDENTIAL TRANSITION ZONE
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This map is for illustrative purposes only and is not intended for parcel specific decision-making.

ERIE MUNICIPAL AIRPORT



2.5.2 Climate

Table 2-3 summarizes temperature and precipitation data from Longmont, Colorado, the location of the nearest weather reporting station disseminating detailed information. The Colorado Climate Center at Colorado State University characterizes area weather:

- Dry winters with an occasional wind-blown snow. Some very cold temperatures alternating with some surprisingly warm days.
- Windy springs with highly changeable weather, an occasional blizzard, large temperature changes and an occasional gentle soaking rain or wet snow to help nurture the grasslands.
- Low-humidity summers with hot days and comfortable nights. The threat of big thunderstorms is always there, and the Plains see some of the most ferocious hail storms of the entire continent.
- Pleasant falls, often dry.

Wind

Historical airport planning used winds atop the NOAA weather tower due northeast of EIK. Based upon this location and its data, Runway 15-33 did not meet FAA's recommended 95 percent coverage

of wind in all-weather conditions.

FAA details the objectives of wind analysis noting that the desirable wind coverage is 95 percent. That is; a runway, or runways, at a given alignment should have a crosswind component less than a given threshold 95 percent of the time. These thresholds are: 10.5 knots for small aircraft, 13 knots for larger general aviation aircraft, and 16 knots for larger turbo-prop and some jet aircraft and 20 knots for the largest turbine commercial and general aviation turbine aircraft. The underlying notion is that larger aircraft are better able to accommodate crosswind, without regard to pilot skill, but simply because of size.

Two sources of wind data were gathered for this planning. Rocky Mountain Metropolitan Airport (BJC) is the location of the nearest weather reporting station with a sufficient record to meet FAA guidelines for wind adequacy. In addition, approximately three years' worth of wind data has been withdrawn on a monthly basis from the EIK AWOS. These data were used to create the wind roses found on Exhibit W, on the following page.

Table 2-3

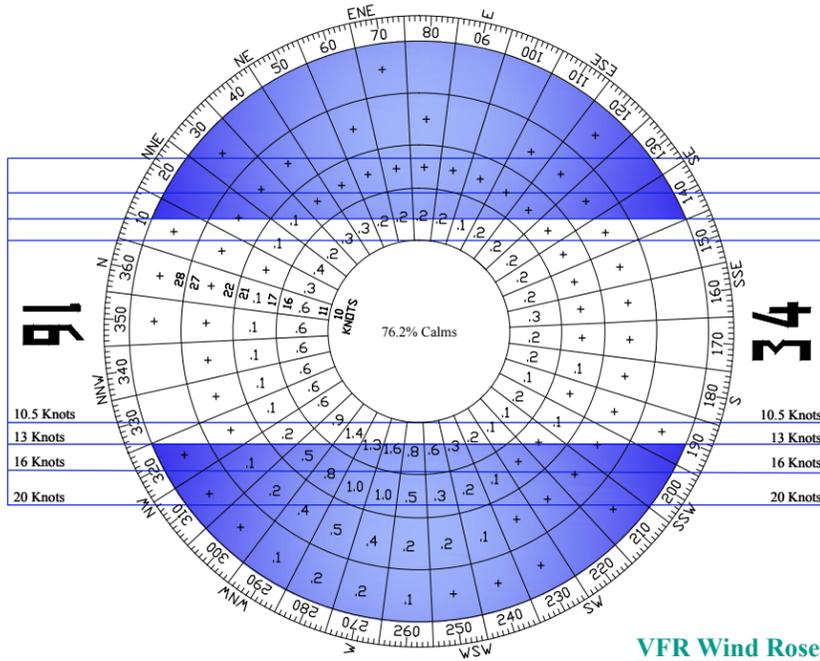
Climate (Average Temperatures; Total Precipitation/Snowfall)

(Source: Western Regional Climate Center)

Degrees Fahrenheit/Inches	Maximum	Minimum	Precipitation	Snowfall
January	42.6	11.6	0.35	4.8
February	46.0	15.9	0.45	5.5
March	52.8	22.8	0.99	7.1
April	62.3	32.0	1.74	4.9
May	71.6	41.7	2.45	0.7
June	82.1	49.6	1.70	0.0
July	88.4	54.7	1.38	0.0
August	86.6	53.0	1.21	0.0
September	78.3	43.7	1.21	0.5
October	66.6	32.7	0.96	1.8
November	52.3	21.6	0.63	5.3
December	44.1	13.6	0.46	5.3
Annual	64.5	32.7	13.53	35.9



BJC

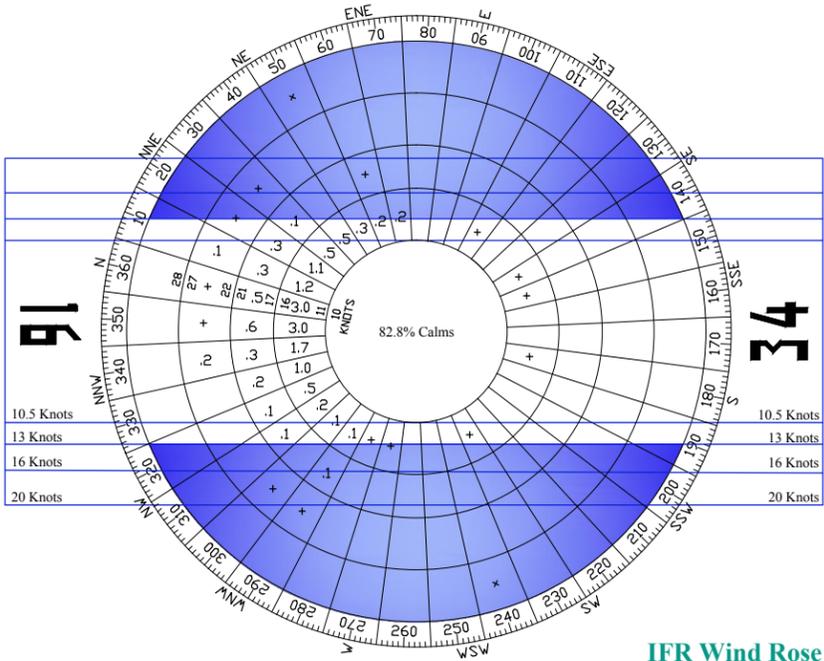


VFR Wind Rose

Source: National Climatic Data Center
 Location: Broomfield, Colorado 72469 (BJC)
 Period: January 1, 2000 to December 31, 2009
 Number of Observations: 46,280
 IFR Sky Conditions:
 Cloud Ceiling: 1,000 Feet or Greater
 and Visibility: 3 Statute Miles or Greater

VFR Wind Coverage

Runway	10.5 Knots	13 Knots	16 Knots	20 Knots
16-34	84.81%	89.13%	93.65%	97.13%

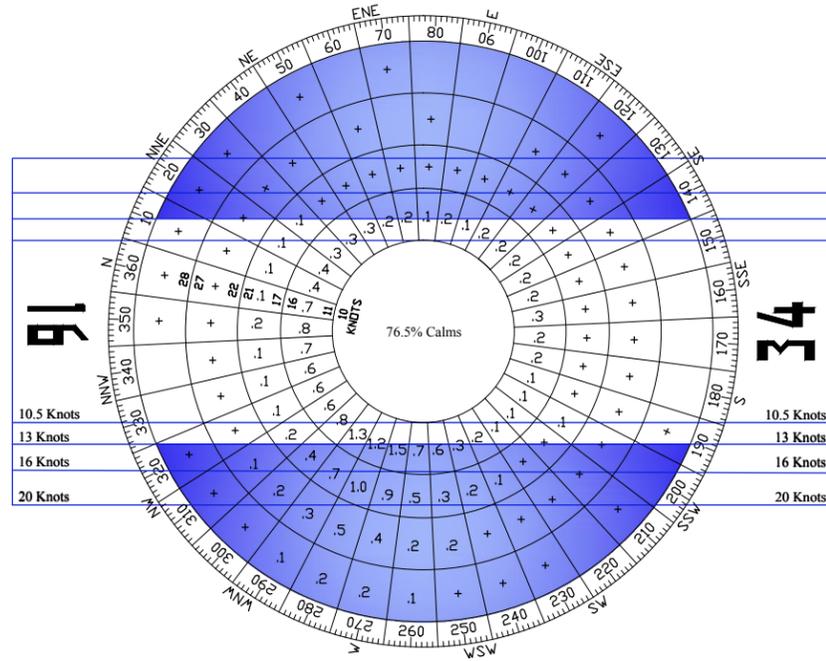


IFR Wind Rose

Source: National Climatic Data Center
 Location: Broomfield, Colorado 72469 (BJC)
 Period: January 1, 2000 to December 31, 2009
 Number of Observations: 2,592
 IFR Sky Conditions:
 Cloud Ceiling: 200 to 1,000 Feet;
 and Visibility: 1/2 to 3 Statute Miles

IFR Wind Coverage

Runway	10.5 Knots	13 Knots	16 Knots	20 Knots
16-34	97.91%	98.89%	99.57%	99.73%



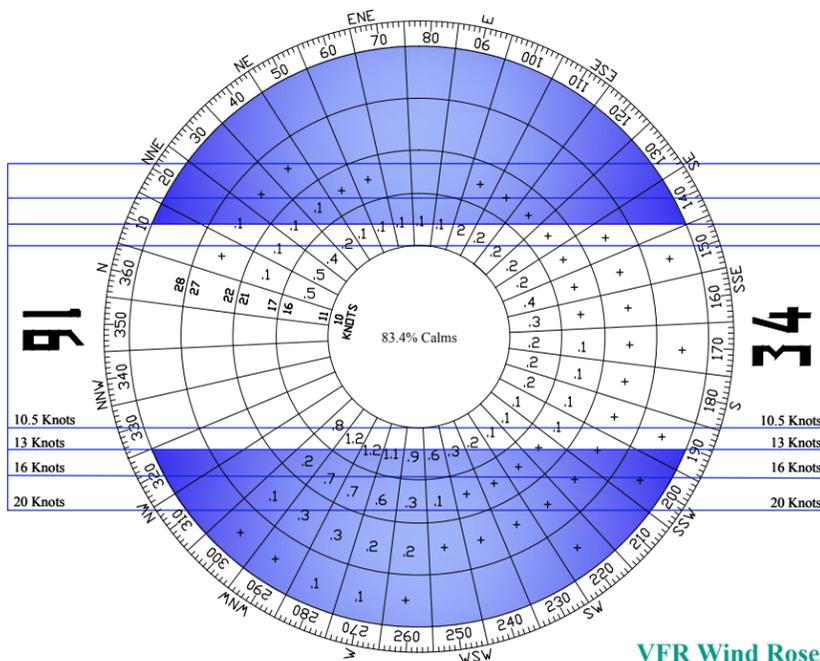
All-Weather Wind Rose

Source: National Climatic Data Center
 Location: Broomfield, Colorado 72469 (BJC)
 Period: January 1, 2000 to December 31, 2009
 Number of Observations: 49,753

All-Weather Wind Coverage

Runway	10.5 Knots	13 Knots	16 Knots	20 Knots
16-34	85.71%	89.8%	94.05%	97.31%

EIK

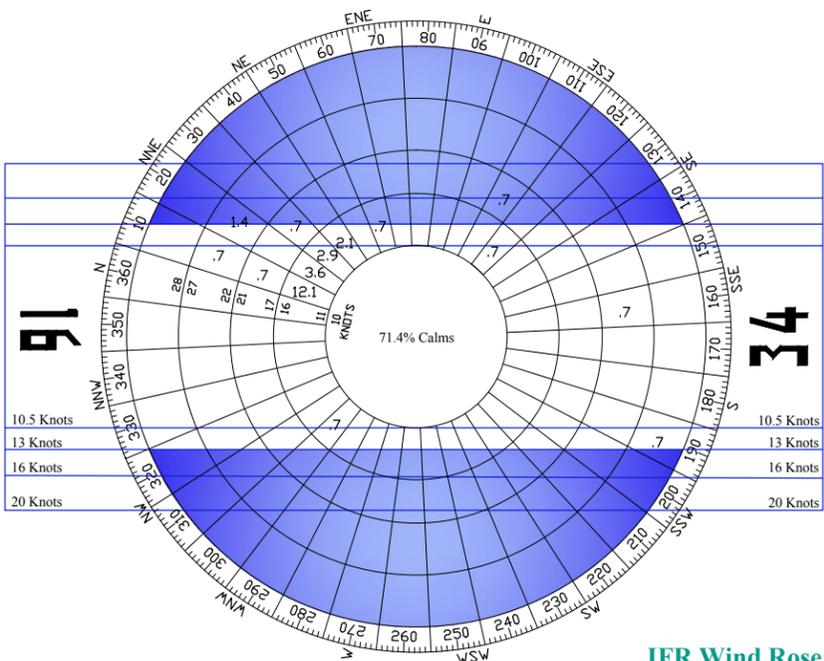


VFR Wind Rose

Source: Erie AWOS
 Location: Erie, Colorado (EIK)
 Period: July 26, 2010 to October 24, 2012
 Number of Observations: 34,257
 IFR Sky Conditions:
 Cloud Ceiling: 1,000 Feet or Greater
 and Visibility: 3 Statute Miles or Greater

VFR Wind Coverage

Runway	10.5 Knots	13 Knots	16 Knots	20 Knots
16-34	88.96%	92.64%	96.27%	98.53%

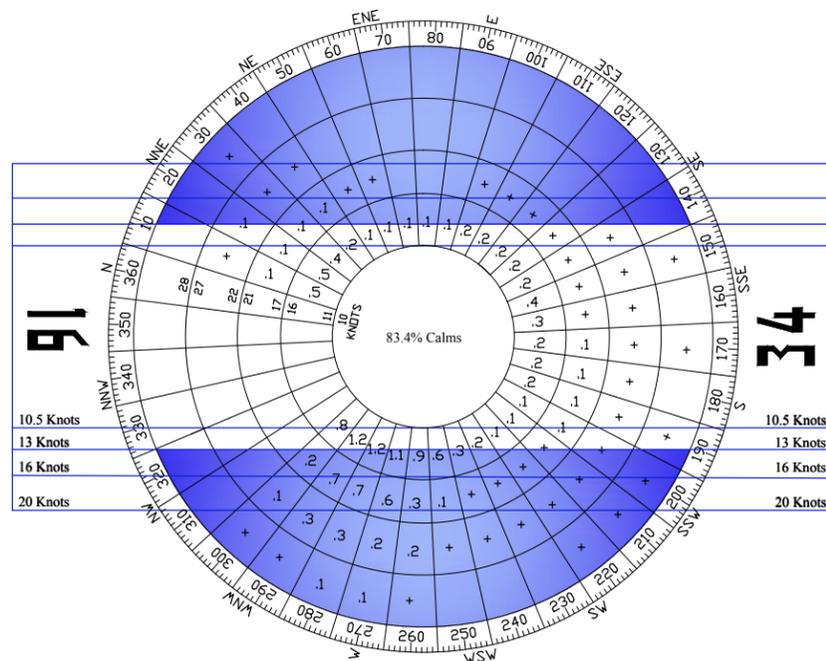


IFR Wind Rose

Source: Erie AWOS
 Location: Erie, Colorado (EIK)
 Period: July 26, 2010 to October 24, 2012
 Number of Observations: 401
 IFR Sky Conditions:
 Cloud Ceiling: 200 to 1,000 Feet;
 and Visibility: 1/2 to 3 Statute Miles

IFR Wind Coverage

Runway	10.5 Knots	13 Knots	16 Knots	20 Knots
16-34	93.31%	97.38%	99.59%	100%



All-Weather Wind Rose

Source: Erie AWOS
 Location: Erie, Colorado (EIK)
 Period: July 26, 2010 to October 24, 2012
 Number of Observations: 34,607

All-Weather Wind Coverage

Runway	10.5 Knots	13 Knots	16 Knots	20 Knots
16-34	88.99%	92.66%	96.29%	98.54%

No.	Revision	Ckd	Date

Erie Municipal Airport
 Town of Erie, Co

ADG AIRPORT DEVELOPMENT GROUP, Inc.
 1776 South Jackson Street / Suite 650
 Denver, Colorado 80210-3802
 303.782.0882 / 303.782.0842 fax
 www.ADGairports.com

Project No.: EIK1398M
 Designed By: SMP
 Drawn By: MTP
 Approved By: SPM
 Date: November 2012

A.I.P. Project Number: 3-08-0090-13-2012

Wind Data

Exhibit: **W**

With respect to the BJC data, Runway 15-33 does not meet FAA's recommended 95 percent coverage of wind in all-weather and VFR conditions in the 10.5, 13 and 16-knot speed classifications, and the 10.5 knot speed classification in IFR conditions. With respect to the KEIK data, Runway 15-33 does not meet FAA's recommended 95 percent coverage of wind in all-weather and VFR conditions in the 10.5 and 13-knot speed classifications.

Note that the runway alignment identified on Exhibit W is Runway 16-34, rather than the current Runway 15-33. As a matter of explanation, the runway numerals are to be modified based upon the existing runway alignment of 167.7° minus a current (November 2012) declination of 8.75° East, resulting in a magnetic runway bearing of 158.95°, this within a 155°-165° range, indicating 16 and necessarily, 34.

2.5.3 NEPA

The 1969 National Environmental Policy Act (NEPA) established a US National environmental policy and the Council on Environmental Quality (CEQ). The primary result of this legislation as it relates to the Town as Sponsor, is the requirement to prepare for FAA, as lead agency, environmental clearance documents for an AIP project, generally termed the: *Proposed Federal Action*.

FAA promulgated the *Environmental Desk Reference for Airport Actions* along with other guidance documents to ensure conformity with NEPA. Implementation conformity in this regard results in an FAA-generated environmental finding through one or more of these processes and documents: (1) a Categorical Exclusion (CE), (2) an Environmental Assessment (EA) or (3) an Environmental Impact Statement (EIS).

Twenty-three environmental impact categories are subject to analysis based upon the specific

proposed project's stated purpose and need, along with reasonable project alternatives. Impact category significance is characterized in terms of threshold impacts; that is, a record of decision or a finding of a no significant impact is given if the quality or quantity of impacts does not reach identified thresholds.

Because the Town is obligated to comply with FAA grant assurances, federal and state environmental agencies have jurisdiction, and compliance mandates conformity to NEPA in this regard on a project-specific basis.

A review and description of each environmental impact category along with a limited baseline data gathering effort constitutes the remainder of this section.

The first impact category is Air Quality.

1. Air Quality

Pursuant to the Clean Air Act (CAA), the US Environmental Protection Agency (EPA) established six criteria pollutants into the National Ambient Air Quality Standards (NAAQS):

1. Carbon Monoxide (CO)
2. Lead (Pb)
3. Nitrogen Dioxide (NO₂)
4. Ozone (O₃)
5. Particulate Matter (PM₁₀, PM_{2.5})
6. Sulfur Dioxide (SO₂)

Sampling and monitoring for these criteria pollutants is occasionally performed statewide, and any quantity of pollutant which exceeds the threshold specified per CAA and its derivatives, results in a geographic area being placed into non-attainment, with CAA. Non-attainment areas are managed by the state of Colorado through their State Implementation Plan (SIP). The SIP is essentially an EPA-approved remediation plan, which specifies actions that the state will take to reach future attainment with CAA. CAA mandates



that no federal agency will participate in a project that does not conform to the SIP, within a non-attainment area.

Air quality in the EIK area is generally good (poorer during seasonal inversions) with ambient concentrations of NAAQS pollutants below established thresholds, with the notable exception of 8-Hour Ozone, characterized as marginal; ozone is a derivative of the NO₂ NAAQS pollutant. In accordance with FAA Order 5050.4A *Airport Environmental Handbook*, no air quality analysis is required for general aviation or small commercial service airports with less than 180,000 annual forecast operations; however, analysis pursuant to other federal requirements is noteworthy.

FAA's Emission and Dispersion Modeling System (EDMS) is the air quality modeling software of choice for depiction of the geographic distribution and quantity of NAAQS pollutants.

Based on the above it is assumed that there will be a project-specific EDMS analysis necessary if *de minimus* thresholds are exceeded.

2. Biotic Resources

For NEPA environmental analysis purposes, biotic resources refer to area flora and fauna, including their habitat. This impact category instructs reference to state-listed threatened, endangered or other species of special concern and their habitats. Should consultation reveal potential for impact, species-specific mitigation may be required.

Current query to the Colorado Parks and Wildlife revealed species, but not those specific to Weld County. Regardless, seven amphibian, 19 birds, 23 fish, 13 mammals, 10 reptiles and two mollusks were state-specified. These species are found throughout Colorado, and may or may not

be found within the area of project-specific concern. Field visits by a qualified biologist, possibly through a biological or ecological assessment or other investigation may be required to make positive identification of reference species and/or habitat and/or find a biological opinion.

3. Coastal Barriers

Barrier islands and landforms often provide protection from wind-driven weather and surf and effectively protect coastal areas from damage. As a result the Coastal Barrier Act of 1982 provided protections for the Coastal Barrier Resource System. Given that the Airport is at a distance from any coastal areas, no analysis in this regard has been completed, nor is any anticipated.

4. Coastal Zone Management

Coastal areas consist of waters and land which are: nationally designated as important resources, effectively protected via the Coastal Zone Management Act of 1972, and are provided protections by the Coastal Zone Management Program. Given that the Airport is at a distance from coastal areas, no analysis in this regard has been completed, nor is any anticipated.

5. Compatible Land Use

The compatible land use impact category primarily relates to aviation noise; and, if the determining analysis for noise does not rise to the threshold level to substantiate mitigation, then category impacts for compatible land use will likely reach similar conclusions. Also important to the determining impacts are:

1. Community disruption
2. Business relocations
3. Induced socioeconomic impacts
4. Wetland or floodplain impacts
5. Critical habitat alterations



As discussed in the upcoming noise impact category portion of this section, existing or proposed noise sensitive land uses surrounding airports is generally a sub-optimal condition, without mitigation.

Noise impacts notwithstanding, other land use concerns are important. Given that the federal government is not provided the constitutional authority to make local or regional land use decisions, FAA relies upon Sponsors to provide reasonable protections. FAA provides advisory guidance and mandates grant assurance compliance. Grant assurances specify that the Town will take reasonable steps to protect EIK from incompatible land uses. As described earlier, these steps usually involve development of land use plans and zoning which keep incompatible land uses, like some kinds of residential use, at a distance. This coupled with height restriction zoning to protect an airport's airspace are the two relevant issues in this regard.

Also, potential wildlife attractants such as landfills, sewage treatment facilities and such, should be located more than 10,000 feet from airfield pavements.

This document and its process will provide land use compatibility recommendations as derived through the planning process.

6. Construction

Airport construction impacts may consist of dust, aircraft and equipment emissions, modified storm water discharges, spills and noise.

A National Pollution Discharge Elimination System (NPDES) permit is generally required based upon the amount of area (no more than one, or five acres) disturbed. The permit specifies actions taken to manage quantities and rates of storm water runoff and sediment control measures.

In addition to the NPDES permit, the state may require a general permit for discharges, pursuant to an overall Storm Water Pollution and Prevention Plan (SWPPP). Not all state requirements above apply and a determination may be solicited upon specific project identification.

7. Section 4(f) Resources

Section 4(f) refers to that section within the Department of Transportation Act of 1966, and its derivatives, stating that if a given project requires use of a publicly-owned park, recreational area or wildlife or waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance, is approvable if (1) there is no other prudent or feasible alternative which would avoid use, and (2) project planning includes all possible mitigation to minimize harm.

Consultation with the US Environmental Protection Agency (EPA), the US National Park Service (NPS), the US Fish and Wildlife Service (FWS), and the Colorado State Historic Preservation Officer (SHPO) may be necessary to determine appropriateness and proximity of any Section 4(f) lands and potential project impact as they may substantiate threshold impacts.

St. Vrain State Park, the nearest state park is some 8 miles due northeast east of EIK. At its closest point, the nearest federal lands of subject, Rocky Flats National Wildlife Refuge is southwest of EIK. Flagg Open Space Park is due southwest of EIK at, and south of the County Line Road and Baseline Road intersection. Several Boulder County and Lafayette Open Space and Regional Parks are found 1½ miles due west of EIK along with a neighborhood park in nearby residential developments.



8. Federal Endangered/Threatened Species

While the Biotic Resources portion of this section identified the relevant state species, this portion deals exclusively with Federal endangered, threatened or candidate species along with critical habitat, all pursuant to the Endangered Species Act. Table 2-4 identifies these species in Weld County.

Field visits by a qualified biologist, through a biological or ecological assessment or other investigation, may be required to make positive identification of the reference species and/or habitat. Consultation with FWS is prerequisite to project impact category threshold determination.

9. Environmental Justice

Analysis to determine potential disproportionate and/or adverse effects on low-income or minority populations is prerequisite to project impact category threshold determination per (US) Executive Order 12898 and DOT Order 5610.2. Demographic, Census or state and local population, ethnicity and employment data, along with public outreach are used to determine threshold impact significance.

Given that the airport has relatively low activity, baseline category impacts may not reach thresholds of significance, providing that there is

no comment of relevance during a project public consultation process.

10. Farmlands

Farmlands of prime, unique or of state or local importance, so designated through scoring via Farmland Conversion Impact Rating Form (AD1006) with the United States Department of Agriculture (USDA) National Resources Conservation Service (NRCS) may require mitigation. Project specific threshold category impacts should be considered through NRCS consultation.

11. Floodplains

Executive Order (US) 11988 and DOT Order 5650.2 specifies that sensitive development should remain outside the base, 100-year floodplain. Zones A, AE and/or V on a Flood Insurance Rate Map (FIRM) produced the Federal Emergency Management Agency (FEMA) generally depicts these areas. FEMA recommends municipal adoption of ordinance to ensure compliance with the Order.

The Town has promulgated its *Floodplain Overlay District (FPO)* (Code Section 10-2-7) associated with Coal Creek, and other waterways to this end. Figure 2-6 shows the FIRM of the airport area.

Table 2-4
US Threatened or Endangered Species in Weld County

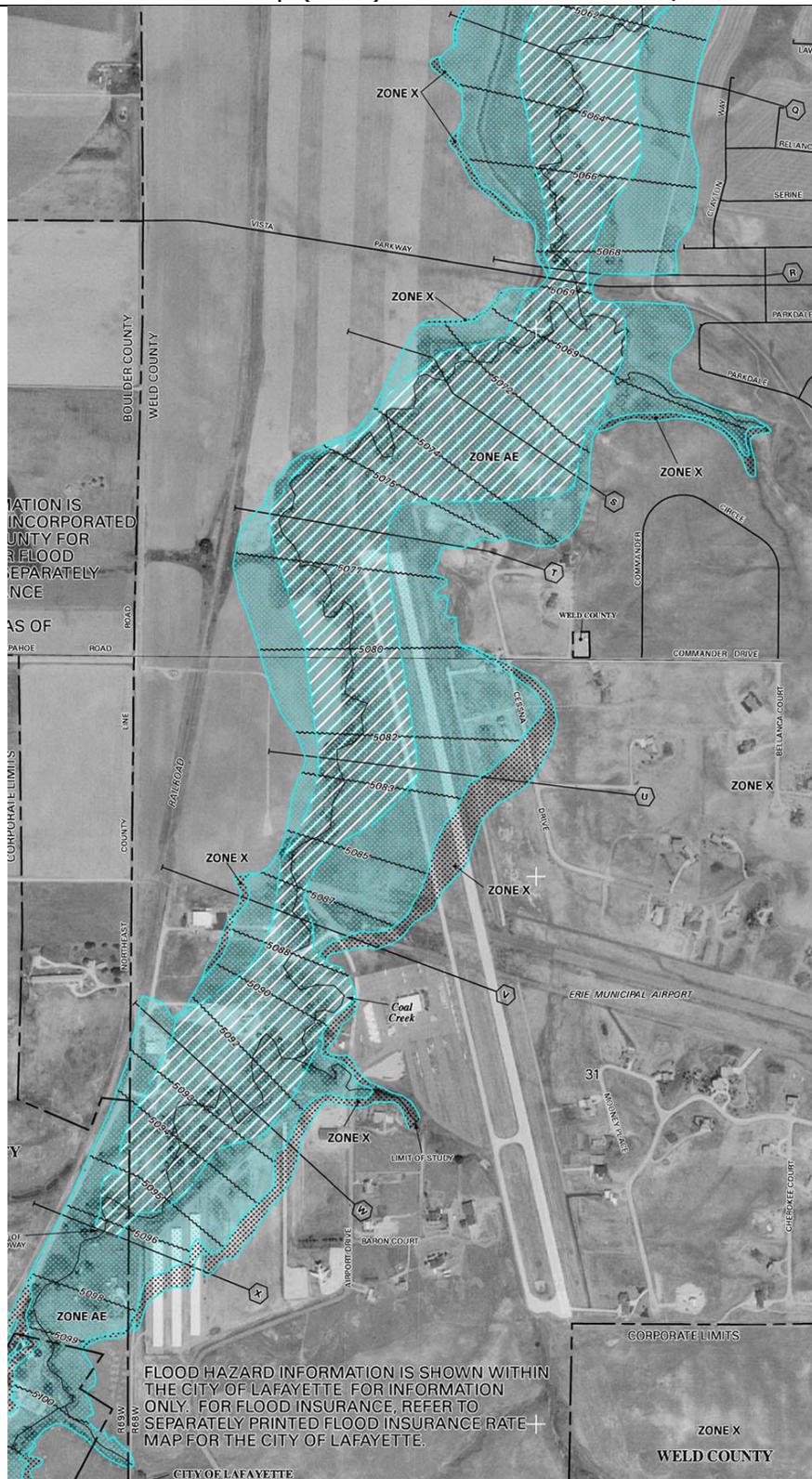
(Source: US Fish and Wildlife Service)

Species (Common Name)	Taxon	Status
Colorado Butterfly plant	Plants	Threatened
Least Tern	Bird	Endangered
Whooping crane	Bird	Endangered
Mexican Spotted owl	Bird	Threatened
Pallid sturgeon	Fishes	Endangered
Black-Footed ferret	Mammals	Threatened (Experimental)
Preble’s meadow jumping mouse	Mammals	Threatened
Piping Plover	Bird	Threatened
Ute ladies’-tresses	Plants	Threatened
Western Prairie Fringed Orchid	Plants	Threatened



Figure 2-6
Flood Insurance Rate Map (FIRM)

(Source: Federal Emergency Management Agency {FEMA})



LEGEND

- SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD EVENT**
The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard are designated by the following codes: AE: Areas of 1% Annual Chance Flood Elevation is the water surface elevation of the 1% annual chance flood.
- ZONE A**
No base flood elevations determined.
- ZONE AE**
Base flood elevations determined.
- FLOODWAY AREAS IN ZONE AE**
The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.
- OTHER FLOOD AREAS**
Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
- ZONE X**
Areas determined to be outside the 0.2% annual chance floodplain.
- OTHER AREAS**
Areas in which flood hazards are undetermined, but possible.

MAP SCALE 1" = 500'

250 500 1000 FE

MAP REPOSITORY
Erie, CO 80516
Street, Erie, CO 80516
Hobbs, 645 (Maps available for sale and distribution)
INITIAL IDENTIFICATION
JUNE 28, 1974

FLOOD HAZARD BOUNDARY MAP REVISIONS
NOVEMBER 28, 1975

FLOOD INSURANCE RATE MAP EFFECTIVE
OCTOBER 17, 1978

FLOOD INSURANCE RATE MAP REVISIONS
September 14, 1982
September 29, 1990
September 2, 2005: To update contents limits, to change base flood elevations, to change special flood hazard areas, to update map format, and to incorporate previously issued letters of map revision.

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0443J

FIRM
FLOOD INSURANCE RATE MAP
BOULDER COUNTY,
COLORADO
AND INCORPORATED AREAS

PANEL 443 OF 615
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:	COMMUNITY	NUMBER	PANEL	SUFFIX
	BOULDER COUNTY	080293	0443	J
	ERIE, TOWN OF	080281	0443	J
	LAFAYETTE, CITY OF	080285	0443	J

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
08013C0443J

MAP REVISED
DECEMBER 18, 2012

Federal Emergency Management Agency

ERIE MUNICIPAL AIRPORT



Note that the floodway is found in white crosshatching and the floodplain (or Floodway Fringe, as the Town Code identifies it) extents are blue. Notably, with respect to floodway (Section 10-2-7-C-6):

1. A regulatory floodway is adopted,
2. New construction of any type is precluded,
3. No filling or excavating is permitted,
4. Flammable/hazardous materials storage is not permitted,
5. EIK is permitted by right, but not if: "structures, fill, excavation" is required.

It is noteworthy that the northern half of the runway is currently within the 100-year floodplain and the northern parallel taxiway extents within the floodway.

12. Hazardous Materials

Hazardous, for purposes herein, refers to industrial wastes, petroleum products, dangerous goods and other contaminants. EPA maintains online databases to search known contaminated sites in accordance with the following legislation:

1. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
2. Resource Conservation and Recover Act (RCRA)
3. Toxic Substances Control Act
4. Oil Pollution Act
5. Community Environmental Response Facilitation Act (CERFA)

Impact category significance relates primarily to the number of hazardous materials, substances and wastes storage, handling and spills and the quantity of subject material. Should investigation reveal sufficient hazardous materials, substance or wastes, permitted remediation or mitigation may be necessary.

Project specific consultation with the state may be necessary to determine threshold impact significance. EPA's *EnviroMapper* revealed several

instances of air-related reporting associated with the various oil and gas natural resources extraction sites around EIK. Nearby water-related reporting included Lafayette's water treatment facility, the recent replacement of the taxiway bridge crossing Coal Creek. Waste and Land-related reporting includes Aerosystems, Rocky Mountain Propellers, EIK (Town) and a location near Bonanza and Highway 7.

An Environmental Site Assessment (Phase I) should precede purchase of land with AIP funds. This effort provides field reconnaissance, inventories environmental data with limited assurance that the site is free of hazardous materials. Should a recognized environmental condition be noted, progression to Phases II or III may be necessary.

13. Historic Properties

An historic property for purposes herein is defined as any prehistoric or historic district, site, building, structure or object included in, or eligible for inclusion in the National Register of Historic Places (NHRP). Section 106 of the National Historic Preservation Act (NHPA) provides for a process with the Colorado State Historic Preservation Officer (SHPO) to determine effect and impact category significance. Also, analysis pursuant to the Archaeological Resources Protection Act (ARPA), Archaeological and Historic Preservation Act and the Native American Graves Repatriation Act may be necessary.

Potential for a historic site may require execution of a phased (classed) Cultural Resource Survey or other archaeological/historic investigation to I: Identify, II: Evaluate, and III: Mitigate cultural, historical or archaeological sites of significance.

The nearest register site, the Lincoln School, home to Town administrative offices in *old town* Erie is 2-3 miles north of EIK, and several houses



within Lafayette and Louisville are also in the register, a farther distance.

14. Induced Socioeconomic Impacts

A given project's potential to cause induced or secondary socioeconomic impacts on the community via these factors should be identified:

1. Shifts in patterns of population movement or growth
2. Public service demands
3. Changes in business and economic activities
4. Other factors identified by the public

Baseline category impacts are not expected to reach thresholds of significance, provided that there is no public comment of relevance during project specific consultation.

15. Light Emissions and Visual Effects

Disturbance of area sensitive land uses due to airport lights or activities is of primary concern for this impact category. Given that the airport has relatively low activity, baseline category impacts are not expected to reach thresholds of significance, providing that there is no public comment of relevance during project specific consultation.

16. Noise

Aircraft noise is often one of the most concerning or objectionable environmental impact for a given project or airport environ. Existing and future noise impacts should be evaluated based upon industry standards, as related to the human environment and potentially sensitive species and historic properties; with mitigation provided as appropriate.

FAA has adopted and prescribes use of the Day-Night average sound Level (DNL) noise metric as the cumulative metric of choice for baseline analysis and/or for a given proposed federal action. The DNL noise metric uses the amount of

aircraft noise, measured in decibels (db) over a 24-hour period, with an increase of 10 db for each aircraft operation occurring between the hours of 10:00 p.m. to 7:00 a.m.

FAA's Integrated Noise Model (INM) is the noise modeling software of choice for depiction of the geographic distribution of aircraft noise. INM is designed to show the geographic distribution of an average day's aircraft noise about the landing area or runway. Noise, in this regard, is louder and more intense closer to the landing area or runway and diminished with distance. Db value increments typically produced for simple analysis by INM are 75, 65 and 55 db.

Using INM, the area around the runway within which 65 db modeled noise occurs using the DNL methodology can be depicted in plan view. The limits of this 65 db area are inscribed with a line noted as 65 DNL.

FAA has selected 65 DNL as the threshold impact category value of noise significance for most general aviation airports, including EIK. Noise sensitive land uses within the modeled 65 DNL are potentially of environmental consequence.

FAA environmental guidance notes that a noise modeling effort is generally not required when the 65 DNL is not expected to extend past airport property limits. And, the 65 DNL generally does not extend past airport property limits when no more than 90,000 average yearly operations and/or 700 annual jet-powered operations occur.

700 annual jet-powered operations may occur now or well within the 20-year time frame of this planning process; and, noise contours will be produced for this planning. Given that the airport has relatively spirited aircraft activity, baseline category impacts are expected to reach thresholds of significance, and any noise sensitive



land uses surround the airport will be addressed with mitigation measures and techniques recommended, as necessary. Of importance in this regard is airpark residences likely within the 65 DNL; these residence will not be considered sensitive or reaching impact category threshold.

17. Social Impacts

Health and safety risks to children and other socioeconomic impacts including residential relocation, division or disruption of established communities, change of surface transportation patterns, disrupting orderly and planned development along with creation of a notable change in employment levels all related to social impact analysis to the human environment.

Baseline category impacts in this regard are not expected to reach thresholds of significance, providing that there is no public comment of relevance during project specific consultation.

18. Solid Waste

The Solid Waste Disposal Act of 1965 defines solid waste as garbage, refuse or sludge from a waste treatment facility, water supply treatment facility, or an air pollution control facility including solid, liquid, semisolid or contained gaseous material resulting from industrial, commercial, mining, and agricultural or community activities.

Airport construction activities produce solid wastes and consultation with appropriate area agencies should reveal the ability of local disposal or transfer facilities to accommodate expected loads and load types. Project specific analysis, pursuant to the proposed federal action, should be undertaken to ensure that solid wastes related to airport construction activities can be locally accommodated and should describe transport, containment and control to the final destination.

19. Water Quality

Point source discharges of water into the environment, such as from sanitary sewer systems or collection basin drainage along with non-point discharges such as storm water runoff from airfield surfaces may drain pollutants such as oils and pesticides into the natural environment and be cause for consequential water quality impacts. US EPA, FWS and state agencies should be consulted on a project-specific basis in accordance with the following legislation:

1. Federal Water Pollution Control Act as amended by the Clean Water Act (CWA)
2. Clean Water Act (CWA)
3. Safe Drinking Water Act (SDWA)
4. Fish and Wildlife Coordination Act

A Water Quality Certificate from EPA, and NPDES Permit from the State may be necessary on a project-specific basis along with an EPA determination for any drinking water impacts. Documentation related to an airport-specific spill response plan, often maintained through airport certification may be necessary.

Water quality analysis in this regard may require supplemental analysis related to wetlands, floodplains, aquatic species impacts and other NEPA impact categories along with ground water protection.

20. Wetlands

A wetland is defined by a qualified wetland delineation specialist as having all three of the necessary components, (1) hydrology (2) vegetation and (3) soil type. A wetland system may be defined as jurisdictional or non jurisdictional by the US Army Corps of Engineers (USACE) depending upon whether it is connected or adjacent to US navigable waters.

In the event impacts to jurisdictional wetland by a proposed federal action are apparent, USACE



may issue a Section 404 permit pursuant to CWA. This permit, along with other necessary environmental clearances allows construction activities to proceed. Wetland banking is often a suitable compensatory mitigation technique, involving purchase and protection of nearby, suitable wetlands as replacement.

EPA, FWS, the National Marine Fisheries Service (NMFS) and equivalent state and local agencies should also be consulted regarding wetland habitat and species impacts.

The CCROW may feature wetlands of concern for NEPA analysis and consequence.

21. Wild and Scenic Rivers

Rivers or sections thereof, designated Wild and Scenic per the Wild and Scenic Rivers Act of 1968 are those designed by the Department's of Interior or Agriculture, which exhibit remarkable scenic, recreational, geologic, fish, wildlife, historic or cultural value. A portion of the Cache La Poudre in Larimer County is the only river in the state of Colorado so designated.

22. Cumulative Effects

Any resource-specific impacts from a proposed federal action (as individually described in the previous 21 impact categories) added to the past, present and other reasonably foreseeable actions within a defined time period and geographic area for that resource should be described in a cumulative impacts analysis. These analyses should include federal and non-federal participation and be specific to each of the impact categories, as appropriate.

2.5.4 Sustainability

Although the topic of sustainability, as it applies to general aviation airports like EIK, does not necessarily fall under the banner of *environmental* per this chapter's subsection, the



historical consequence of sustainability practices are environmentally-related, and it is for this reason the following discussion is found at this location in the narrative. The above graphic is an FAA-provided depiction.

The first graphic on FAA's website under Airport Sustainability is above and the first works are: "Sustainable actions- reduce environmental impacts help maintain high, stable levels of economic growth, and help achieve "social progress", a broad set of actions that ensures organizational goals are achieved in a way that's consistent with the needs and values of the local community".

The Town Board of Trustee indicate a "relentless commitment to maintaining our Town as a great place to live, work and play. Further, sustainability is more than an option; it is part of daily life. The Town is on the way to becoming a model for eco-friendly civic development with environmentally sound 'green' practices."

Potential sustainability topics for planning consideration include, but are not limited to:



1. LEED certification for future buildings,
2. Town Board of Trustee advocacy to state and federal delegations for strengthening of aircraft emissions standards, utilization of alternative aircraft fuels and energy sources,
3. Voluntary-based noise mitigation measures/policies, with pilot/resident outreach program,
4. Establishment of/adherence to best management practices for water retention and irrigation,
5. Identification and mitigation, as necessary, of any on-airport hazardous materials,
6. Establishment of airport-wide waste reduction/recycling goals,
7. Guidance of occasional public outreach to articulate sustainability goals and progress. Establishment of EIK sustainability constituent group/sub-group dedicated to contemporaneous environmental stewardship and economic development, guided by Town sustainability guidelines and precepts.
8. Working with area utilities to consider a solar site, or other renewable arrangement, on/near EIK. (*Note: siting of a solar facility will require close coordination with FAA*)
9. Limiting the use of diesel engines.
10. And, LED fixtures installation as appropriate.

The Sustainable Aviation Guidance Alliance (SAGA) was formed in 2008 by professional aviation industry groups to assist airports and their sponsor in creating sustainability predispositions and programs. The SAGA database contains nearly 1,000 general practices segregated into the below subject areas:

- Administrative
- Stormwater Management
- Water Efficiency
- Ground Transportation
- Landscape and Exterior Design
- Energy Efficiency and Atmosphere

- Indoor Environmental Quality
- Facility Operations
- Materials and Resources
- Construction Practices

With reference and applicability to various airport areas:

- Terminal Buildings and Interior Areas
- Landside Service Areas
- Landside Airport-Related Development
- Landside Transportation
- Airside

Relating to overall sustainability goals:

- Economic Viability
- Operational Efficiency
- Natural Resources Conservation
- Social Responsibility

For example, database practice number 706 is “use high post-consumer, recycled content paper” and it falls under the materials and resources subject area. The database says that this practice applies to the terminal building and interior areas, landside services areas and landside airport-related development, while meeting the natural resources overall goal.

This rather comprehensive database may be used as baseline for sponsor and tenants in the creation of a sustainability plan and execution of its policies and intent.

On a somewhat related note, a limited number of airport sustainability master plans have been created in recent years at airport of all sizes. This planning was completed as pilot projects with sustainability as a defining priority. CDOT is currently crafting statewide general aviation sustainability guidance to assist the sponsors of the 60 Colorado general aviation airports. This planning and its reporting will invariably be useful to the



Town should it choose to adopt guidance therefrom or craft a stand-alone plan.

2.6 Area Airspace, Airports and Navigational Aids

The operating airspace environment surrounding EIK is important given that the EIK is part of the state and national transportation system. A description of the local airspace surrounding EIK along with nearby public-use airports and navigational aids follows.

2.6.1 Airspace

FAA is charged with oversight of the nation's civil navigable airspace and has established various regulatory and non-regulatory airspace classes and areas, endeavoring to create a safe operating environment for all types of aviation users.

US airspace classifications are conceptualized on Figure 2-7. Regional airspace surrounding the airport is shown on Figure 2-8.

Several classes of airspace are relevant to flight operations in the near vicinity. EIK and most other Denver/Front Range publicly-owned airports underlay Class E airspace.

Class E airspace's horizontal limits are shown in a shaded violet on Figure 2-9 and exist from 700 feet up to 17,999 above ground level (agl). Pilots operating within Class E airspace must be certificated or in training.

Rocky Mountain Metropolitan Airport's Class D airspace limits exist approximately two miles due south of EIK with vertical limits at 7,999 feet above mean sea level (msl). Within this airspace (when effective) a pilot must (1) be certificated, and (2) establish and maintain two way radio contact with ATC prior to entrance. This Class D

airspace is shown a singular blue-dashed circle on Figure 2-9.

Denver International's Class B airspace exists directly above EIK from 10,000 to 12,000 feet msl with a southerly horizontal limit at US Highway 7. South of Highway 7 the lower limit drops to 8,000 feet msl. Within this airspace a pilot must (1) be certificated, (2) establish and maintain two way radio contact with air traffic control (ATC), (3) obtain ATC clearance to enter (and be prepared to be denied that entrance), and (4) transmit an assigned transponder code. Class B airspace is shown as somewhat concentric circles, in a lighter blue on Figure 2-9. Finally, a solid red circle depicts the limits of Denver International's 30 nautical mile diameter 'Mode C' veil, containing an area within which an assigned transponder code must be transmitted.

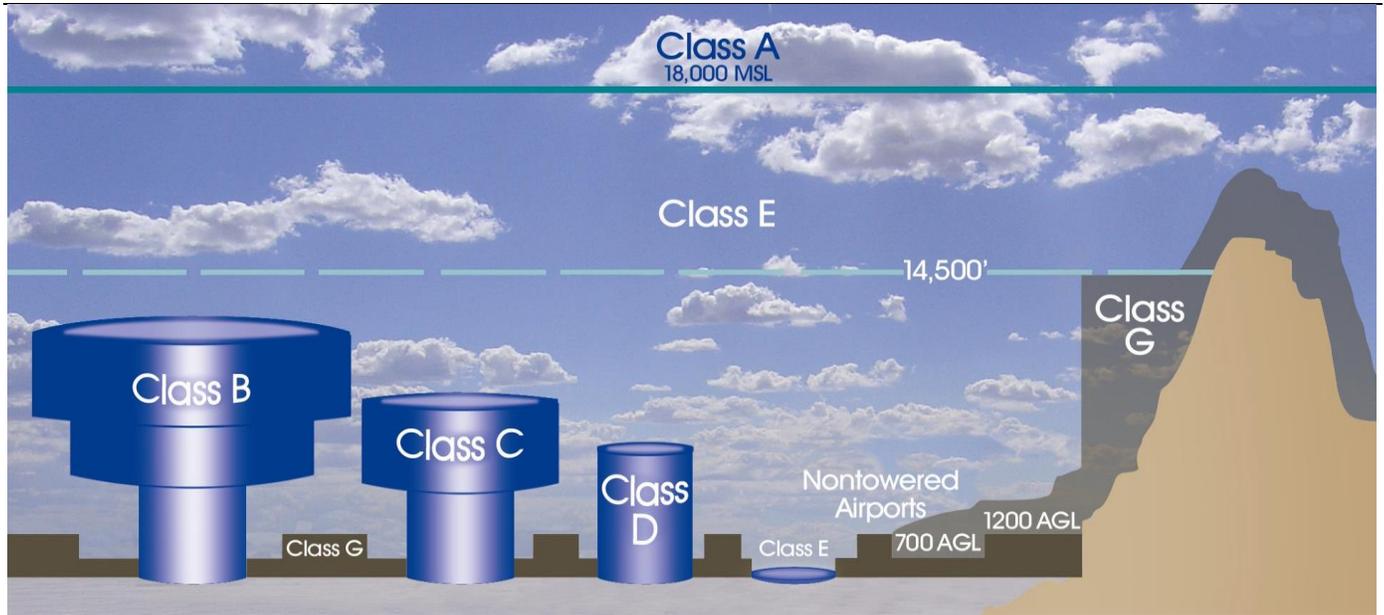
Victor Airway 85 originates from a nearby navigational facility and nearly overflies EIK. This and other similar airways constitute FAA pre-established paths between navigational aids for ease of aircraft operation at altitudes between 1,200 and 17,999 feet agl. No Military Operations Areas (MOAs), or Alert, Warning, Restricted, or Prohibited airspace exists in the near EIK vicinity.

Pilots may remotely control EIK airfield lighting via the Common Traffic Advisory Frequency (CTAF) of 123.0 MHz. This frequency is assigned to EIK and select other nearby airports by FAA as the frequency from which pilots may elect to announce location and intentions. Pilots may contact the EIK AWOS at (303) 604-4339 or 133.825 MHz, along with Denver Approach/Departure Control at 126.1 MHz.



Figure 2-7
US National Airspace Classifications

(Conceptualization: ADG)



2.6.2 Area Airports & Navigational Aids

EIK is near a number of general aviation and commercial service airports along with enroute and local navigational facilities. These facilities are identified in blue and blue-green within Figure 2-8, briefly described within Table 2-5.

Denver International Airport (DEN) is the fifth busiest airport in the nation, in terms of passenger boardings, the largest airport in terms of area, and is currently the only commercial service airport serving the Denver market. KDEN provides domestic and international service via a variety of carriers.

Rocky Mountain Metropolitan Airport (BJC) is a NPIAS reliever to DEN is home to Denver Air Center, a full-service Fixed Base Operator (FBO) along with 12 aviation maintenance and four aircraft charter businesses, two car rental agencies, five on-site government offices and 21 other businesses. BJC is frequented by corporate aircraft and has approximately 120,000 annual aircraft operations the past few years along with

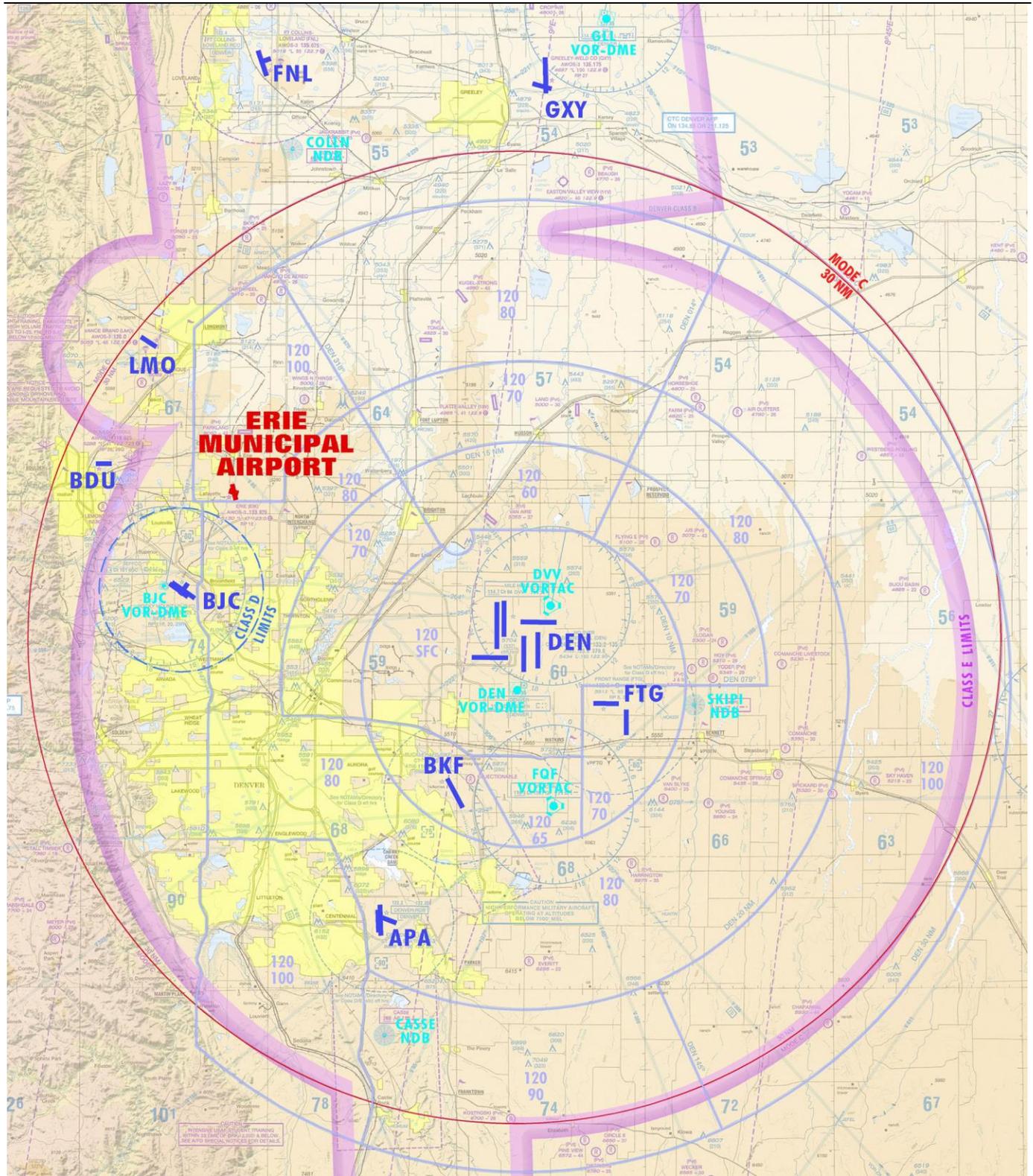
the following numbers of based aircraft: 249 single-engine, 64 multi-engine, 29 jet and 16 helicopters. BJC is sponsored by Jefferson County.

Centennial Airport (APA) is a NPIAS reliever to DEN and always ranks as one of the busiest national general airports, in terms of operations. APA is home to five FBOs along with numerous aviation maintenance/avionics, management and flying clubs, sales, detailing, charter/air ambulance, car rental agencies, and other aviation and non-aviation businesses. APA is frequented by larger corporate aircraft and has approximately 300,000 annual aircraft operations in past years along with the following numbers of based aircraft: 575 single-engine, 133 multi-engine, 121 jet and 20 helicopters. APA is sponsored by the Arapahoe County Public Airport Authority.



Figure 2-8
VFR Terminal Area Chart

(Source: FAA, with highlighting by ADG)



ERIE MUNICIPAL AIRPORT



Fort Collins-Loveland Airport (FNL) is a certificated, formerly commercial service airport. FNL is home to a full-service FBO along with three aviation maintenance, three flight training, and two aircraft charter businesses. FNL is frequented by corporate aircraft and had approximately 106,700 recent annual aircraft operations along with the following numbers of based aircraft: 210 single-engine, six multi-engine, eight jet and 12 helicopters. FNL is jointly-sponsored by the Cities of Fort Collins and Loveland.

Buckley Air Force Base (BKF) is a military installation housing the 460th Space Wing, 460th medical group, and the Colorado National Guard's 140th Wing, known for its F-16 Fighting Falcons.

Greeley-Weld County Airport (GXY) is a general aviation airport home to a full-service FBO along with three aviation maintenance, three flight training, and two aircraft charter businesses. GXY accommodates large and small aircraft and had approximately 143,000 recent annual aircraft operations along with the following numbers of based aircraft: 161 single-engine, 26 multi-engine, four jet and four helicopters. GXY is sponsored by the City of Greeley/Weld County.

Vance Brand Airport (LMO) is a general aviation airport home to two full-service FBOs along with several aviation maintenance businesses, and some specializing in skydiving, soaring and gliding. LMO is frequented by general aviation and smaller corporate aircraft with approximately 62,000 annual aircraft operations in a recent year, along with the following numbers of based aircraft: 234 single-engine, 18 multi-engine, two jet and seven helicopters. LMO is sponsored by the City of Longmont.

Boulder Municipal Airport (BDU) is a general aviation home to a full-service FBO along with

several specialty aviation businesses and interest groups, some specializing in soaring/gliding. BDU is frequented by general aviation and glider aircraft with approximately 50,582 annual aircraft operations in a recent year, along with the following numbers of based aircraft: 94 single-engine, 12 multi-engine, 45 gliders and one helicopter. BDU is sponsored by the City of Boulder.

The Falcon (FQF) and Mile High (DVV) Very-High Frequency Omni-Directional Range with Tactical Aircraft Control (VORTAC) navigational facilities are near BKF and DEN, respectively. The Denver (DVV), Jeffco (BJC) and Gill (GLL) Very-High Frequency Omni-Directional Range with Distance Measuring Equipment (VOR-DME) navigational facilities are near DEN and GXY, respectively. These navigational facilities provide 360-degree radio-interrogation capabilities for aircraft navigation and are shown as lightly blue-shaded compass roses on the following page.

The Skipi, Casse and Calln NDBs primarily serve IAPs for FTG, APA and FNL, respectively. These ground-based navigational radio facilities enable properly-equipped aircraft to 'home' to a location.



Table 2-5

Area Publicly-Owned Airports and Navigational Aids

(Source: AirNav, FAA Master Records, Websites)

Airport	Runway(s) Description Best Approach Procedure	Services	Distance Direction
Denver International (KDEN), Denver, CO	All Runways Except 16R/34L: 12,000' x 150', <i>ILS Precision</i> Runway 16R/34L; 16,000' x 150' <i>ILS Precision</i>	All Fuel, All Repair Certificated Field Towered Field	19 Miles Due Southeast
Rocky Mountain Metropolitan Broomfield, CO (BJC)	Runway 11L/29R; 9,000' x 100' <i>ILS Precision</i> Runway 11R/29L; 7,002' x 75' Runway 2/20; 3,600' x 75'	All Fuel, All Repair Certificated Field Towered Field	7 Miles Due South
Centennial (APA) Englewood, CO	Runway 17L/35R; 10,001' x 100' <i>ILS Precision</i> Runway 17R/35L; 7,000' x 77' Runway 10/28; 4,800' x 75' <i>GPS/RNAV Non Precision</i>	All Fuel, All Repair GA/Towered Field	28 Miles Due South
Fort Collins-Loveland (FNL) Loveland, CO	Runway 15/33; 8,500' x 100' <i>ILS Precision</i> Runway 6/24 2,273' x 40'	Fuel, Major Repair Certificated Field Towered Field	26 Miles Due North
Buckley Air Force Base Aurora, CO (BKF)	Runway 14/32; 11,006' x 150' <i>ILS Precision</i>	Military Towered Field	23 Miles Due Southeast
Greeley-Weld County (GXY) Greeley, CO	Runway 16/34; 10,000' x 100' <i>ILS Precision</i> Runway 9/27; 5,801' x 100' <i>GPS/RNAV Non Precision</i>	All Fuel, Major Repair GA/Non-Towered Field	32 Miles Due Northeast
Vance Brand (LMO) Longmont, CO	Runway 11/29; 4,800' x 75' <i>GPS/RNAV Non Precision</i>	All Fuel, Major Repair GA/Non-Towered Field	11 Miles Due North
Boulder Municipal (BDU) Boulder, CO	Runway 8/26; 4,100' x 75' Runway 8G/26G; 4,100' x 20'	All Fuel, Major Repair GA/Non-Towered Field	8 Miles Due West
Navigational Aid	Facility Frequency	Distance	Direction
Falcon VORTAC (FQF)	116.3 MHz	27 Miles	Due Southeast
Mile High VORTAC (DVV)	114.7 MHz	21 Miles	Due Southeast
Denver VOR-DME (DEN)	117.9 MHz	21 Miles	Due Southeast
Jeffco VOR-DME (BJC)	115.4 MHz	7 Miles	Due South
Gill VOR-DME (GLL)	113.3 MHz	37 Miles	Due Northeast
Skipi NDB	321 KHz	30 Miles	Due Southeast
Casse NDB	260 KHz	33 Miles	Due South
Colln NDB	400 kHz	22 Miles	Due North

2.7 Based Aircraft and Operations

CDOT staff inspects EIK on an annual basis to assess facilities and activity. Data from the annual inspection for the year ended December 31, 2011 indicates that the airport accommodates 95,000 total annual aircraft operations, including 37,500 itinerant and 57,500 local general aviation operations. The inspection notes and Airport Management confirms that approximately 60 percent of aircraft operations are locally-executed and 40 percent are itinerant. The inspection notes a based aircraft number: 165 single-engine, nine multi-engine, one jet and seven helicopters, along with one glider and five ultralight craft, totaling 182 aircraft. This is the current, official FAA record.

CDOT's *2011 Colorado Airport System Plan Update* identified 67,500 annual aircraft operations in the year 2010 (4.2 percent of state total), along with 179 based aircraft (3.4 percent of state total), again for the year 2010. The *Plan* forecast 68,800, 70,400, and 73,940 total annual operations for the years 2015, 2020 and 2030, respectively. Similarly, the *Plan* forecast 183, 187, and 196 total based aircraft for the same respective years.

FAA maintains and administers its own internal historical activity record and forecasting effort, the 2012 Terminal Area Forecast (TAF). With respect to EIK, the TAF notes:

- 28,660 annual itinerant general aviation operations and 45,000 annual local general aviation operations, totaling 73,660 annual operations during the 2005, 2006 and 2007 years.
- 35,000 annual itinerant general aviation operations and 55,000 annual local general aviation operations, totaling 90,000 operations from the year 2009 to the year 2040.

And:

- 227 based aircraft during the 2005, 2006 and 2007 years
- 36 based aircraft during the 2008 and 2009 years.
- 173 based aircraft from the year 2009 to the year 2040.

FAA maintains a database of based aircraft for official record keeping purposes. This database currently indicates 180 based, validated aircraft at EIK. Consultation with Airport Management revealed that an additional 11 aircraft are based at EIK for most of the year, including a newly relocated Eclipse 550 jet aircraft, bringing total based aircraft to 191 for purposes of this planning, distributed as follows: 173 single-engine, nine multi-engine, two jet and seven helicopters.

A general rule-of-thumb for estimating aircraft operations at uncontrolled airports is contained in FAA guidance, recommending: 250 operations per based aircraft for rural general aviation airports, 350 for more urban, busier general aviation airports and 450 for reliever airports in metropolitan areas, resulting in 47,750, 66,850 and 85,950, operations respectively.

Prescription for this planning document included consultation with staff at DEN to inventory radar-based operational activity. EIK is suitably proximate to FAA's radar facilities, and a log of aircraft operations with radar contact was accessed. This consultation revealed that EIK accommodated approximately 7,400, 6,900, and 7,300 general aviation operations in 2008, 2009, and 2010 respectively. Data for these years was the most recent available from FAA via DEN.

Given that these activity levels were below that previously identified in previous years, effort was made to seek resolution. Data from FAA's radar

facilities for LMO was inventoried in the same fashion, revealing approximately 9,150, 9,720 and 9,613 operations in 2008, 2009, and 2010 respectively. Expressed as a percentage, LMO operations exceeded EIK operations by 19.1, 29.0 and 24.0 for the respective years, averaging 24 percent over the three year period.

Using LMO's 2010 FAA-approved baseline aircraft operations estimate of 61,211 from the recently completed *Airport Master Plan*, along with a 24 percent discount, an estimated 46,520 operations for the year 2010 is derived. This value was selected by the master plan consultant and approved by FAA as a reasonable estimate of recent aircraft operations at EIK.

Historical operations counts derived from the *FAA Airport Master Record* and carried through to other databases are sometimes found to overstate the volume of activity through no fault. This lack of accurate operational activity counts is not limited to EIK as aviation activity at non-

towered airports has historically been difficult to inventory. Table 2-7 identified baseline activity for this planning.

2.8 Airfield Design Standards

FAA specifies a coding scheme for airport design that relates airfield design criteria to the operational and physical characteristics of aircraft using an airport in a meaningful quantity, along with IAP visibility. This scheme, and standards compliance thereto, relates to individual runways and runway ends at certificated and/or obligated airports. EIK is an obligated airport, because the Town has accepted federal grant-in-aid funds from FAA. The scheme relates to runways, along with their associated IAPs and taxiways/aprons.

2.8.1 Design Standards Criterion

The first portion of the overall scheme relates to a given runway, and runway end, and has three criterion. Table 2-6 shows the criterion collectively, the Runway Design Code (RDC).

Table 2-6

Runway Design Code (RDC) Criterion

(Source: FAA)

Aircraft Approach Category (AAC)	Aircraft Speed Range (Knots)
A	Less than 91
B	More than 91, but less than 121
C	More than 121, but less than 141
D	More than 141, but less than 166
E	More than 166

Airplane Design Group (ADG)	Aircraft Wingspan Range	Aircraft Tail Height Range
I	Up to but not including 49'	Up to but not including 20'
II	49' up to but not including 79'	20', up to but not including 30'
III	79' up to but not including 118'	30', up to but not including 45'
IV	118' up to but not including 171'	45', up to but not including 60'
V	171' up to but not including 214'	57', up to but not including 60'
VI	214' up to but not including 262'	66', up to but not including 80'

IAP Capability in Terms of Visibility (Statute Mile)

RVR 4000	Lower than one mile but greater than ¾ mile
RVR 2400	Lower than ¾ Mile but not lower than ½ mile
RVR 1600	Lower than ½ Mile but not lower than ¼ mile
RVR 1200	Lower than ¼ Mile



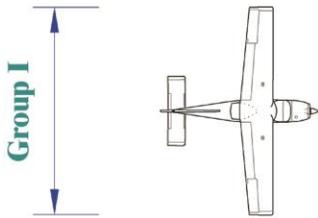
The first, represented by a letter, is the Aircraft Approach Category (AAC). It relates to aircraft approach speed, an aircraft operational characteristic ($1.3 \times V_{so}/V_{ref}$ {the speed of an

aircraft in the landing configuration}). The second designator, Airplane Design Group (ADG), is represented by a roman numeral. It is related to aircraft wingspan and aircraft tail height; physical

Figure 2-9
Representative Aircraft by Wingspan

(Visualization: ADG)

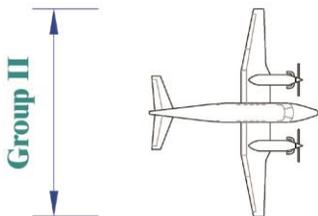
Personal Aircraft



Representative Aircraft

- Beechcraft Bonanza 35, 36
- Cessna 150, 172, 402, 414
- Beechcraft Baron
- Beechcraft King Air 90, 200
- Cessna 182, 206, 401, 421
- Cessna Citation I, CJI
- Piper Navajo-34, Cheyenne-42

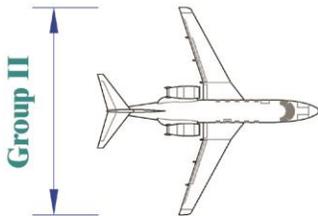
Business Aircraft



Representative Aircraft

- DHC Twin Otter
- Beechcraft 1900
- Cessna Citation II, III, V
- Dassault Falcon 50, 200
- Embraer 145 RJ; ATR 42, 72
- Rockwell Aero Commander 560, 680
- DeHavilland Dash-7, 8

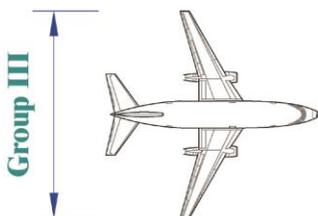
Corporate Aircraft



Representative Aircraft

- Gates Lear 24, 25
- IAI Westwind 1124
- Bombardier 600, 601
- Gulfstream III
- Starship 1
- Cessna Citation X
- Gates Lear 35

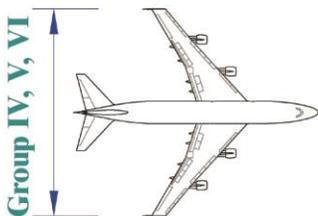
Commercial Aircraft



Representative Aircraft

- Airbus 318-321
- Boeing 727, 737
- McDonnell Douglas DC-9
- MD-82; MD-83
- Gulfstream II, IV, V

Transport Aircraft



Representative Aircraft

- Airbus 300, 310
- Boeing 757, 767
- Lockheed Hercules C-130
- Airbus 330, 340, 380
- Boeing 747; Boeing 777
- Antonov 124, 225
- Lockheed Galaxy C-5



characteristics. Figure 2-9 on the prior page shows representative aircraft grouped only by Airplane Design Group (ADG), for reference.

A given runway end may accommodate an IAP with various FAA-approved visibilities. These visibilities are segregated and expressed in terms of Runway Visual Range (RVR). RVR is a real-time meteorological measurement noted feet and related to ¼ mile visibility increments. RVR

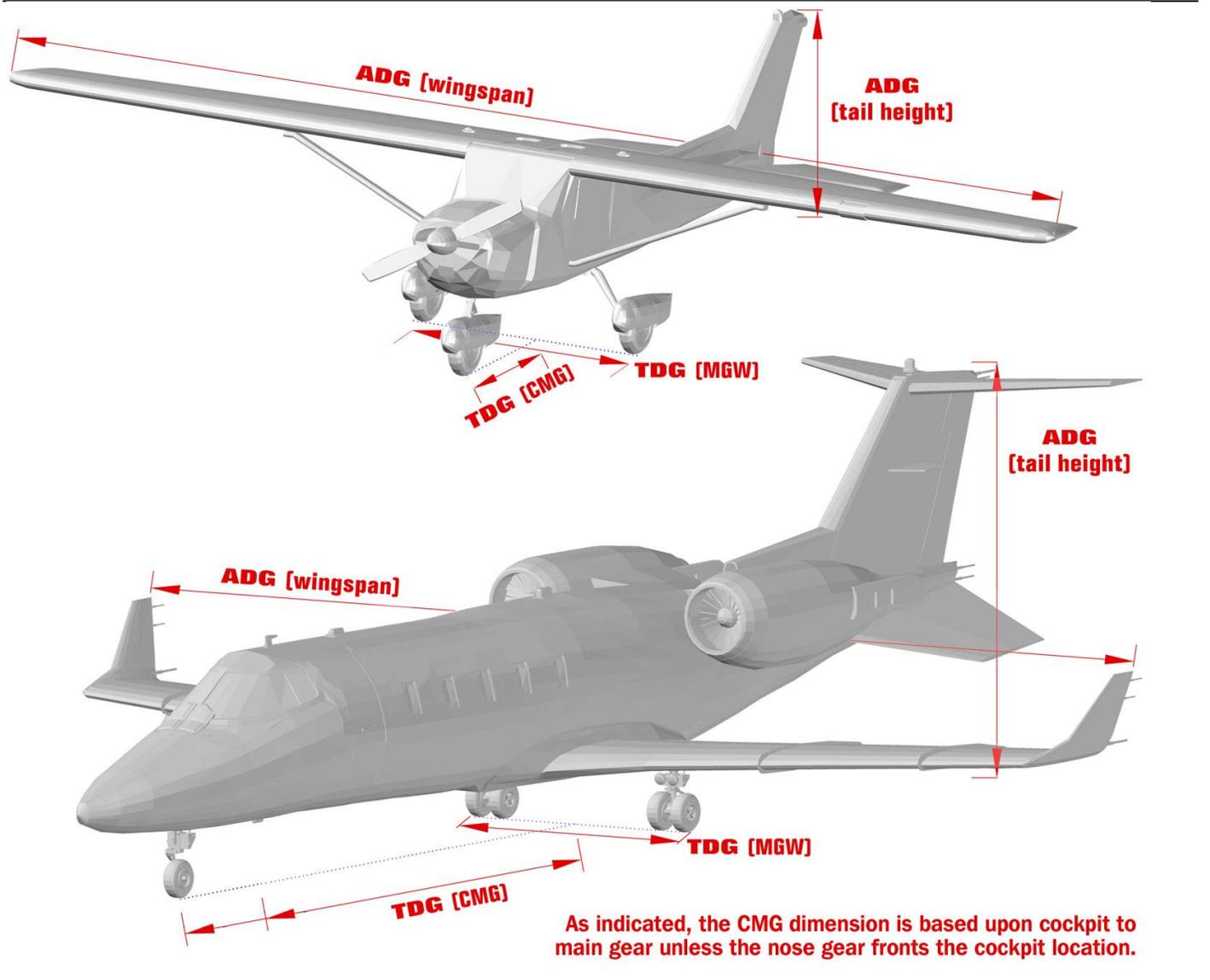
measurements are made at the runway location.

These criterion, the AAC speed, ADG wingspan and tail height, along with IAP capability, combine to identify each runway's RDC and classify design standards, primarily related to runway and runway protection. A RDC is associated with a particular runway end. A field with multiple runways may have multiple RDCs.

Beyond RDC, Taxiway Design Group (TDG) is an

Figure 2-10
Select Airport Design Criterion

(Visualization: ADG)



additional criteria; it is based upon the dimensions of aircraft undercarriage, specifically the distance between the outer edge of the main gear, termed the Main Gear Width (MGW) with the distance between the Cockpit to Main Gear, termed CMG. Note that if the nose wheel fronts the cockpit, the CMG distance increases. Various MGW and CMG ranges combine to make TDG's 1 through 7, with 7 accommodating the largest ranges, and aircraft.

The visualization on the following page, as Figure 2-10, shows the physical aircraft characteristics associated with ADG and TDG.

In many instances ADG and TDG for individual airplanes will be within the same grouping; for example, ADG-I with TDG-1, ADG-II with TDG-2, and AGD-III with TDG-3. Notable exceptions generally include aircraft with a relatively long fuselage.

Note that neither runway end at EIK accommodates a so-called, straight-in IAP (Figure 2-3 depicts IAP-circling minima, meaning that the IAP is not authorized for a runway end), indicating greater than RVR4000 visibility (>RVR4000).

Finally, aircraft weight is an additional criterion to be able to determine suitable application of all airport planning and design at EIK. Aircraft which weigh less than 12,500 pounds (maximum

certificated gross), regardless of wheel configuration, are termed utility or small aircraft. Those which weight more are termed non-utility or large aircraft. Note that the runway, taxiway and the main apron pavement strengths are currently 12,500 pounds SWG.

The most demanding aircraft or group of aircraft with alike physical and operational characteristics that use the airport regularly; generally conducting at least 500 annual takeoffs or landings, is termed the design aircraft. Therefore, a further refining estimate of aircraft operations made in the previous section is needed. This refining estimate is found in Table 2-7, on the following page.

Thus, the current criterion for Runway 15-33 are:

A&B-I; TDG-1, Small Aircraft; >RVR4000,

And, the current criterion for Taxiway A, its connectors and aprons is:

TDG-1, Small Aircraft.

The current design aircraft is the **Beechcraft Baron (BE55); a B-I, TDG-1, small aircraft.**

It is noteworthy that the FAA's Denver Airports District Office maintains a preference, functionally tied to funding for AIP-assisted projects, that future EIK improvements accommodate B-II-2-large design criteria.

Table 2-7
Estimated Operations by RDC, TDG, Weight, and Runway End/IAP Capability *(Source: ADG Estimate)*

Estimated 2012	Visual 15	Visual 33	Circling 15	Circling 33	Total
A&B-I, TDG-1, Small	22,000	19,000	3,110	2,400	46,510
A&B-I, TDG-1, Large	10	10	15	15	50
A&B-I, TDG-2, Large	10	10	25	25	70
A&B-II, TDG-1, Small	80	80	70	70	300
A&B-II, TDG-1, Large	4	4	8	8	20
A&B-II, TDG-2, Large	14	12	12	12	50
2012 Total	22,116	19,118	3,240	2,530	47,000



2.8.2 Design Standards

Design standards encompass various areas, zones, surface gradients and separations standards; select standards are described and tabulated within Table 2-8, based upon Table 2-7 and the current design aircraft:

1. A Runway Protection Zone (RPZ) is a trapezoidal area off each runway end, established to enhance protection of people and property by clearing incompatible land uses. EIK's RPZ's are currently owned partially in fee and wholly in fee and 20:1 aviation easement.
2. The Runway Safety Area (RSA) and Taxiway Safety Area (TSA) are established to ensure that the ground surface adjacent to runways and taxiways is suitably prepared to reduce the risk of damage in the event of an aircraft deviation from paved surfaces. Safety area specifications are dimensional, grade-specific and material-specific.
3. The Runway Object Free Area (ROFA) and Taxiway Object Free Area (TOFA) are established to ensure the safety of aircraft operations by having an area free of objects, except those frangibly-mounted objects, necessary for air navigation or ground maneuvering purposes.
4. The Obstacle Free Zone (OFZ) is a volume of airspace up to 150 feet above airport elevation, centered on runway centerline, primarily established to preclude taxiing and parked aircraft. The runway holdline is sometimes located to coincide with limits of the OFZ.
5. The purpose of the Approach and Departure Clearance Surfaces (AOCS/DOCS) is to provide obstacle clearance for visual approaches and instrument approach procedures. These surfaces are generally three-dimensional trapezoids with 20:1 or 34:1 surfaces extending upward and outward away from each end of runway.

Note that these are the minimum specifications and exceeding the specifications, for an individual project is generally acceptable, but may not be eligible for federal or state funds.

2.8.3 FAR Part 77

Title 14 of the Code of Federal Regulations, Part 77, *Safe, Efficient Use, and Preservation of the Navigable Airspace* specifies various imaginary surfaces considered to protect the airspace around the EIK from objects of natural growth or man-made features, termed obstructions. These surfaces are the primary, approach, transitional, horizontal and conical as described in Section 77.25 and as follows:

1. The primary surface is longitudinally centered on the runway. The elevation of any point on the primary surface is the same as the elevation of the nearest point on centerline. The width of the primary surface is based on the type of approach available or planned for each runway.
2. The approach surface is a surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface. An approach surface is applied to each end of each runway based on the type of approach available or planned for that runway end.
3. The transitional surfaces extend outward and upward at right angles to the runway centerline and runway centerline extended at a slope of 7:1 (± 8.13 degrees) from the sides of the primary surface and from the sides of the approach surfaces.
4. The horizontal surface is a level horizontal plane 150 feet above the established airport elevation, the perimeter of which is constructed by swinging arcs of either 5,000 or 10,000 feet from the center of each end of the primary surface of each runway and connecting the adjacent arcs with lines of tangency.

Table 2-8

Select Current EIK Airport Design Standards

(Source: FAA/ADG)

Standard/Specification	Standard	Existing
Runway Width	60 Feet	60 Feet
Effective Runway Longitudinal Grade	Within $\pm 2\%$ Maximum	Within $\pm 2\%$ Maximum
Runway Pavement Strength (Pounds)	Recommended 12,500 SWG	12,500 SWG
Runway Protection Zones	250'x450'x1,000'	250'x450'x1,000'
Runway Safety Area Width/Beyond End	120'/240'	120'/240'
Runway Object Free Area Width/Beyond End	250'/240'	250'/240'
Taxiway Safety Area Width	49'	49'
Taxiway/Taxilane Object Free Area Width	89'/79'	89'/79'
Runway to Parallel Taxiway A	150'	200'
Runway to Aircraft Holdline on Taxiway A	125'	125'
Runway to Aircraft Parking	>125'	>125'
Obstacle Free Zone Width/Beyond End	250'/200'	250'/200'
Approach Surface (20:1)	400'x3,800'x10,000'	400'x3,800'x10,000
Part 77 Primary Surface Width/Beyond End	250'/200'	250'/200'
Part 77 Approach Surfaces Dimension/Slope	250'x1,250x5,000'; 20:1	250'x1,250x5,000' 20:1

5. The conical surface extends outward and upward from the periphery of the horizontal surface at a slope of 20:1 (± 2.86 degrees) for a horizontal distance of 4,000 feet.

Upcoming chapters contain a depiction of these surfaces and Table 2-8 above contains dimensional information for the primary and approach surfaces.

In addition to these surfaces, Section 77.23 provides for additional obstruction identification guidance; A determination in this regard is made by FAA via proponent filing of FAA Form 7460 *Notice of Proposed Construction or Alteration*.

2.9 Financial/Economic Development

The Town of Erie for accounting purposes, classifies EIK as an enterprise fund. Functionally, this means that EIK is to be operated as a stand-alone financial unit with the Town's umbrella of services. Loans and other short-term means to affect a yearly break-even financial condition are permissible, provided they are approved by the

Town Board of Trustees. Section 2.1.3 of the Town Code specifies that the Town shall establish fees/charges sufficient to recover operating expenditures of the airport fund. Table 2-9 on the following page provides recent financial information.

Economic development is a defining propensity of the Town of Erie. The Town of Erie Economic Development Department is charged with forming a strong and viable partnership between business, government and education. It is as an on-going process that requires foresight and commitment to economic development. The Town's Economic Development Coordinator leads the Town's Economic Development Department and effort.

The Town's Economic Development Department solicits input from myriad of individuals as well as committees and groups to work toward the mutual goals and continued future of the Town and its citizens and businesses.

Table 2-9

(Source: Town of Erie)

EIK Financial Information	2010\$	2011\$	2012\$	2013\$ Budget
Airport Fund Revenue				
Aviation Gas Taxes –Colorado	5,125	8,002	5,100	5,100
Crossing License	-	2,800	-	-
Lease / Rental Buildings	720	168	-	-
Lease of Tie Downs and Hangars	9,198	3,430	-	-
FBO Fees	44,813	41,500	36,000	36,000
Fuel Flowing Fees	-	-	5,400	5,400
Access Through-the-Fence Fees	41,365	15,107	-	-
Late Fees on Past Due Accounts	19	(118)	-	-
FAA Airport Grant	216,901	252,113	150,000	150,000
CDOA Airport Matching Grant	-	580,004	404,400	400,000
Interest Income	2,753	1,222	-	-
Unrealized Gain on Investments	(789)	-	-	-
Miscellaneous Income	8,891	9,064	-	-
Airport Fund Revenue				
Benefit Transfer from General Transfer	701	1,427	-	500
Salaries – Regular	3,560	3,225	50	1,500
Aprons / Runway Maintenance Services	1,100	-	-	-
Building / Grounds Maintenance Services	4,563	-	-	-
Maintenance Contracts	3,978	2,205	1,110	-
Consultation Services	3,978	2,205	1,100	-
Legal Services	70,871	31,094	10,000	5,000
Utilities – Electric Service	16,807	12,128	-	-
Utilities – Gas Service	2,760	2,424	-	-
Utilities – Waste Disp Service	1,631	1,337	-	-
Utilities – Water Service	1,094	484	-	-
Aprons / Runway Maintenance Supplies	173	477	-	-
Building / Grounds Maintenance Supplies	20	-	-	-
Courier Services	20	-	-	-
Membership Dues	178	95	-	-
Permits, Licenses, Other Fees	290	35	100	-
Bad Debt Expense	2,228	-	-	-
Vector Control	13,873	350	-	-
Property Insurance	10,983	12,566	12,600	13,700
Transfer to Storm Drainage Operating Fund	19,813	8,816	-	-
Airport Capital Outlay				
Coal Creek Crossing Replacement	2,201	(2,201)	-	-
Construct East Taxiway Connector	8,461	-	-	-
Repair Mid-field Connector Taxiway	12,779	-	-	-
Replace Runway Lighting System	6,560	-	-	-
Joint Crackseal Concrete Apron	122,261	10,484	-	-
Fuel System Upgrade	67,216	317,400	-	-
Taxiway A4 Connector	35,349	260,764	-	-
PAPI Replacement	32,500	-	-	-
Repave Asphalt Ramp	-	203,338	-	-
Master Plan Update	-	-	250,000	-
Runway 33 Improvements	-	-	340,500	-
Realign Runway 33 Sign / Hold Sign	-	-	7,500	-
Taxiway Lighting System and Guidance Signs	-	-	-	601,900

Offering business site assistance through the entire development and permitting process, resources for programs workshops and services as well as offering incentive programs to real estate professionals

In October 2011, the Town of Erie Urban Renewal Authority was established, empowering the Town to encourage economic vitality and improve public safety. An Airport Area Urban Renewal Plan was produced in December 2012 addressing historical airpark and airport properties along with properties either side of Bonanza Drive and US Highway 7. The purpose of the plan is to “reduce, eliminate, and prevent the spread of blight... while advancing the vision and priorities of the comprehensive plan”. Noteworthy plan objectives include:

- Provide public infrastructure and make more efficient use of existing land,
- Advance uses that leverage public investment in planned improvements,
- Provide a range of financing mechanisms,
- Facilitate public-private partnerships.

Appended the plan is a *conditions survey* finding numerous isolated insufficiencies within and around EIK and the Airpark. These insufficiencies relate to maintenance and landscaping, upkeep, building and facilities condition, older lot and driveway problems, access road needs, and floodplain and drainage issues.

Economic Development Plan

Upstate Colorado Economic Development (UCED) focuses on supporting primary employers in all sectors. Governed by a Board of Directors via a public/private partnership with members from government and business, UCED’s goal is to assist employers with bringing new equity into each community’s local economy.

UCED worked with the Town to create its November 2007 *Economic Development Plan*.

This plan was intended to dovetail with the *2005 Comprehensive Plan* and provide reasonable, workable guidance pursuant to that document:

- A coordinated and efficient pattern of growth
- Quality design and development
- Overall economic vitality
- Balanced land use mix
- Stable, cohesive neighborhoods offering a variety of housing types

The plan notes as salient:

“...the attractiveness of the north metro Denver market will likely attract significant investment over the foreseeable future. The amount of that investment which finds its way to the Town of Erie will depend in part upon the aggressiveness of the community to accommodate retailers and employers.”

“The Town faces both an opportunity and a threat of over the next few years. It can do much to assure its long-term economic viability by securing desirable retail and employment opportunities or it can assume a more vulnerable position by allowing those investment opportunities to locate in the region, but outside its boundaries, thus restricting revenues that are needed to provide services to its residents. ”

The plan infers the Town’s historical and somewhat current position as a bedroom community for the Denver/Boulder Metro area.

A primary result of this plan as it relates to EIK is a recommendation to adopt a master plan which “outlines opportunities for business development and employment opportunities”.

Airport Economic Development Study

The Town adopted the *Airport Economic Development Study* in October 2009. The purpose of the study was to:

- Assess EIK and its surrounds to identify economic development opportunities
- Identify potential sources of funding for physical improvements, pursuant to Town economic development objectives



➤ Develop a plan for EIK self-sustainability

Important points/conclusions within the study's recommended development portion include:

- Future activity at EIK will be smaller-aircraft general aviation activity, and to a lesser degree, 'entry-level' business aviation activity,
- The historical airpark provides a solid tax base, but it will not likely contribute meaningfully to future economic development,
- The closed crosswind runway will not reopen primarily due to lack of FAA/CDOT funding,
- Given that the closed crosswind runway would, in fact be closed, areas north and west of midfield should be redeveloped for apron, hangar and ancillary uses and areas east of midfield are valuable for "commercial development",
- The Town should not invest in a new terminal building at an alternative location.
- The Town should formalize, but not own or manage, a through-the-fence Airport Business Park, with a new service road, on currently undeveloped properties west of the Coal Creek floodplain and north of the existing through-the-fence properties on South Main Street.
- The business park should target aviation maintenance, mixed-use executive aviation office suites, aviation training (potentially including an aviation high school), along with other non-aviation uses including light industrial, professional and mixed-use commercial/retail.
- Vacant properties near/adjacent to EIK, fronting US Highway 7 should be developed for non-aviation uses.
- No improvement to the Airport Road/US Highway 7 intersection other than turning lanes installation.
- The Town should see that EIK accommodates an airport restaurant, hotel, rental car service, fly-in turf tiedown area for golf events along

Bonanza Drive and extended closed runway centerline, welcoming signage, a general public airport viewing area, and increased interaction with the community.

Effective October 2009, EIK was designed by the Colorado Office of Economic Development and International Trade (OEDIT) as an Aviation Development Zone. This designation may qualify an aircraft manufacturer for a state \$1,200 tax credit per new full-time employee.

EIK Economic Development Participants

Representing and supporting Erie's businesses for 17 years, the Erie Chamber of Commerce continues in its goal of improving the quality of life for the residents of Erie. Working with its members, committees, and volunteers, the Chamber offers various benefits and services and support to its members.

The Erie Economic Development Council (EEDC) has evolved into an organization whose members include participants from the Chamber, Town of Erie Board of Trustees, Town Staff as well as members of the public. EEDC promotes the Town to real estate professionals through a variety of venues and its goal is to augment area economic well-being.

The mission of the Erie Airport Economic Development Council (EAEDC) is to maximize the value of EIK for its users and the citizens of Erie. The EAEDC's vision is to promote the creation of high-paying aviation-related jobs that generate real estate and sales tax revenues for the Town of Erie on and adjacent to the airport. The EAEDC is responsible for Erie Economic Development Council activities relating to EIK and its surrounds. The EAEDC is working with companies from around the United States who are looking to make Erie their next home.



EAEDC works to leverage the value of EIK for businesses, educate others as to the value EIK provides to the Town, supports advertising and events that promotes economic development in and around EIK, meet with businesses and developers to leverage relationships and solutions that will help them to be successful, and monitor policy that may affect economic development.

The Metro Denver Aviation Coalition (MDAC) is dedicated to the continued growth and development of Metro Denver's aviation industry, specifically including EIK. The Coalition promotes public policy conducive to economic development, and informs decision makers and the public about the importance of maximizing the economic potential of metro Denver's airports and aviation industry.

The Colorado Aviation Business Association and the Colorado Airport Operators Association advocate for airports and the aviation industry.

General Aviation Appreciation Month

Colorado Governor John Hickenlooper joined 22 other states in issuing a proclamation declaring June 2011 as *General Aviation Appreciation Month*, recognizing the vital contribution all of general aviation, including business aviation, provides to our economy. The proclamation cites a number of indicators that show how general aviation positively impacts the state.

2.10 Opportunities For and Constraints to Aviation Growth

A review, description and depiction of the some of the existing physical site constraints and known, potential opportunities for growth at EIK during this early period of plan development is important to effecting an overall inventory. The Opportunities and Constraints Exhibit is found at the conclusion of this chapter. Note that items

thereon are not meant to be a comprehensive listing of all opportunities and constraints.

Constraints

The dominating, but perhaps not the most important feature of the exhibit is the flood way/floodplain associated with Coal Creek. EIK is not in the most ideal site, given the rising terrain around it and the need to protect/preclude development from an occasional flood. As previously discussed the Town Code specifies that building and facilities should generally not be located within a floodway or floodplain, thus limiting the scope and extent of aviation and non-aviation development. Note that the Town owns and maintains a right-of-way around and along Coal Creek, the limits of which are generally within the floodway/plain. Also note that a floodplain, and steeper grades, exists south of and along the current apron/auto parking area.

A similar development constraint exists with respect to the existing land envelope, and with respect to the AWOS critical area. The AWOS 500-foot radius circle is found near midfield indicating the limits of the critical area. Generally speaking, and with notable exceptions, no buildings or facilities should be located within, thus currently limiting the scope and extent of aviation development.

Buildings on properties on the east side of and adjacent to the runway are sited closer to the runway than may be desirable.

Steep grades south of Runway 33, but north of US Highway 7 along and around extended runway centerline functionally limit potential aviation and non-aviation development.

Several instances of noise impact/concern are noteworthy around EIK. EIK's original airfield configuration and the Airpark predated the Vista



Ridge, Vista Pointe and Anthem developments. Noise complaints have been received from residents within these neighborhoods. An area free of residences, underlying the, then, approach zone, as a derivative of the, then town comprehensive plan was historically planned for Vista Ridge and Anthem, and continues to exist. Anthem is found south of US Highway 7 and Vista Ridge is found at the top, left portion of the exhibit. Anthem residents have often perceived low-flying aircraft on a northerly approach to EIK in the green area off extended centerline, south of US Highway 7. This perception is perhaps due to rising terrain, given that US Highway 7 is approximately 30' higher than the southern runway end elevation, and the ambient terrain is somewhat unchanged through the open area.

Other noise impact/concerns are also noteworthy around EIK. The Town recently annexed vacant property southeast of EIK along US Highway 7. Planned mixed-use development thereon, currently termed Sierra Vista, includes low- and medium-density residential near and east of the southern-most airport properties. This residential use is currently proposed to be separated by open space adjacent to current EIK property.

The Airport Road/US Highway 7 intersection is problematic for vehicle movement, particularly Airport Road to eastbound Highway 7. Faster speeds along Highway 7 combined with limited sight distance due to the rising terrain east of the intersection creates challenges for safe merging at peaking movement periods.

Other airport environs-wide environment and land use constraints are not yet well-defined and may only become so upon specific project investigation, clearance and permitting.

Finally, FAA airport design guidance specifies that a future RPZ should not overlap a public road,

thus constraining a future northerly runway extension without road relocation. Similarly, the potential length of a reactivated crosswind runway, should the Town leadership wish that course of action, would be constrained.

Opportunities

One of the most noteworthy aspects of EIK's current configuration, with respect to opportunities, is its lack of developable, revenue-producing property.

An area south of the current apron, currently airpark residential, may be a good fit for future apron, hangar and other aviation-related, revenue-producing facilities. Easy-to-understand sensitivities exist for current property owners who may not want to move and acquisition considered in this planning may entail voluntary acquisition.

Due west of this area is additional land currently available for TTF hangars and other aviation-related development.

Due south of these properties and north of US Highway 7 is property with non-aviation potential. This property is well-suited for a hotel or other commercial industrial use, if US Highway 7 can be configured to accommodate the expected traffic. The original Airpark plat indicated that the majority of the area was subject to subsidence.

While the newly annexed property along Highway 7 southeast of EIK, termed Sierra Vista, represents a source of potential noise impact, its revenue and tax-generating capabilities are an opportunity for EIK overall, with respect to area economics.

An inter-governmental planning effort was underway for a time now to generate a preferred realignment for US Highway 7 around and farther north of Lafayette. This effort has ceased. Regardless, a potential realignment remains a



topic and a potential alignment is depicted near and north of the Airport Road and County Line Road intersection. Funding and construction of a preferred alignment will likely be a mid to long-term consideration. A new alignment may (1) preclude the existing Airport Road and US Highway 7 intersection, (2) provide an opportunity for a new 'front door' to EIK, and (3) more fully utilize/integrate properties in relatively poor (according to the *conditions survey* noted in Section 2.9) condition along the corridor.

Reactivation of the former crosswind runway is shown as opportunity, but from some constituent perspectives it could very well be a constraint. There is much ground to cover on this issue and the upcoming alternatives analysis will cover it.

Perhaps the two most important opportunities are a northerly runway extension and additional commercial/industrial TTF on properties between the floodplain and County Line Road, north of the existing terminal area.

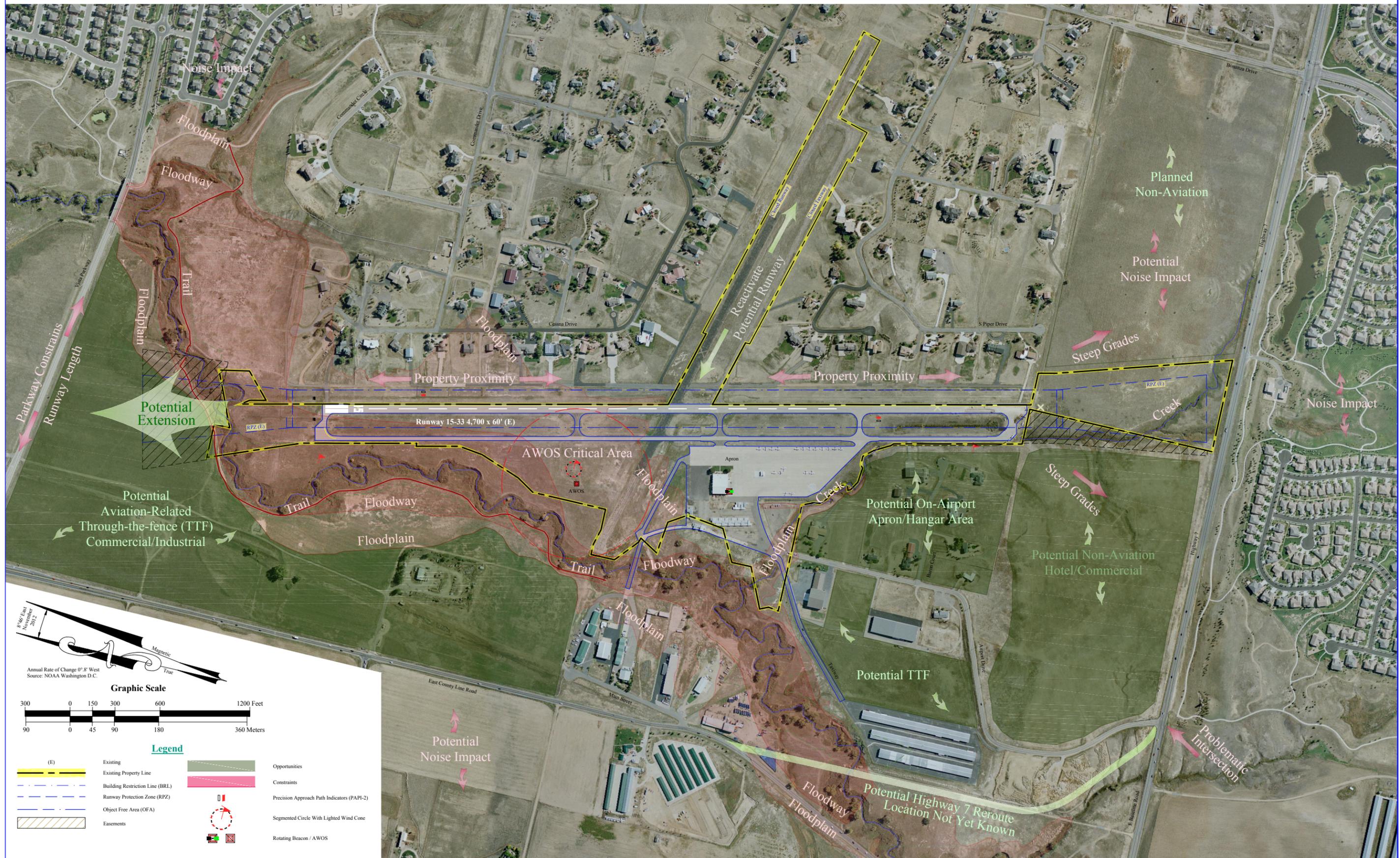
Rising terrain, as briefly discussed in the previous subsection, functionally prohibits a southerly runway extension, but a northerly runway extension could be accomplished. Coal Creek and its floodway/plain and trail are considerations. Environmental coordination and consultation, the necessary land acquisition for FAA standards compliance and land use and zoning changes are also of consequence. Perhaps the defining constraint to a substantial runway extension, as previously noted, is Vista Parkway.

Finally, TTF aviation-related and non-aviation development is perhaps an important consideration of this planning. A large congruent set of parcel due northwest of midfield is relatively undeveloped and is (1) the last larger-scale contiguous property of its kind with potential airport access (2) must be closely

coordinated with FAA for and development, (3) is relatively free of development constraints and already zoned light industrial with County Line Road frontage, (4) will not require acquisition/condemnation for development, only landowner cooperation, (5) represents an minimal opportunity for EIK's enterprise fund, given that the property is envisioned for TTF access, but represents substantial opportunity for Town job growth and tax revenue.



Opportunities for and Constraints to Aviation Growth



8:46 East
 November
 2012
 Magnetic
 True
 Annual Rate of Change 0°.8' West
 Source: NOAA Washington D.C.

Graphic Scale

300 0 150 300 600 1200 Feet
 90 0 45 90 180 360 Meters

Legend

(E)	Existing	Opportunities
---	Existing Property Line	Constraints
---	Building Restriction Line (BRL)	Precision Approach Path Indicators (PAPI-2)
---	Runway Protection Zone (RPZ)	Segmented Circle With Lighted Wind Cone
---	Object Free Area (OFA)	Rotating Beacon / AWOS
---	Easements	

No.	Revision	Ckd	Date

Erie Municipal Airport
 Town of Erie, CO

ADG AIRPORT DEVELOPMENT GROUP, Inc.
 1776 South Jackson Street / Suite 950
 Denver, Colorado 80210-3822
 303.782.0882 / 303.782.0842 fax
 www.ADG-airport.com

A.I.P. Project Number: 3-48-0090-13-2012
 Date: November 2012

Project No.:	EIK1398M
Designed By:	SMP
Drawn By:	MTP
Approved By:	SPM
Date:	November 2012

Opportunities
Constraints

Exhibit:
OC

Chapter Three

Forecasts of Aviation Demand



Chapter Three – Forecasts of Aviation Demand

3.0 Introduction

The Forecasts of Aviation Demand are the basis for determining airport facility requirements. These requirements are then used to plan airport development such as runways and taxiways, apron area, hangar space and the selection of the specific airfield design standards.

Forecasts estimate the nature and magnitude of aeronautical activity and the associated need for airport development for the 20-year planning period. Due to the highly elastic nature of the aviation industry, most aviation forecasts tend to follow longer-term trends rather than fluctuations in any given year or two.

History has repeatedly demonstrated that general aviation airport utilization will be maximized depending upon the level of service provided to the flying and general public, along with local, regional and national economic conditions.

3.1 Forecast Methodologies

Projections of aviation activity may be prepared considering these and other data. Various projections are then considered in the formulation of a forecast. Forecast formulation is a subjective process concerning the extent to which one projection, or a combination of several projections or prevailing or anticipated conditions, represents a reasonable estimate of future aviation activity.

Several statistical projection techniques are available for forecasting demand at EIK. These include regression, trend and market share.

Regression involves the use of historical data to identify a relationship between the selected dependent variable, such as based aircraft, and an independent variable. This relationship is then applied to projections of the independent variable to produce future values for the dependent variable.

Trend projection provides estimates of future values for aviation demand by determining an historic pattern of change and projecting that pattern into the future. The primary assumption of this methodology is that the same factors that have influenced the past will affect the future.

Market share projections involve a review of past activity as a percentage of activity in a larger regional, statewide, or national market or environment. These percentages, or market shares, are then applied to activity forecasts for the aviation demand to produce a market share projection.

Application of these statistical projection techniques require strong, correlative relationships with historical activity levels of aircraft operations and based aircraft. Strong relationships in this regard may not be particularly valuable for this forecasting effort because of a lack of good, yearly historical aviation activity data.



Because of this, these analyses will somewhat be de-emphasized, and in the final analysis, a more subjective judgment of anticipated future aviation activity is necessary, will be employed, the results of which will be approved by FAA.

The Forecasts of Aviation Demand are provided in increments of 5, 10, and 20 years over the 20-year planning period. These periods are also classified in phases; Phase I is the first five years, Phase II is the second five years, and Phase III is the last 10 years. Year 2014 is the base forecast year, while 2033 is the final forecast year.

Efforts are made to report data and projections as percent change for easy reference.

Aeronautical forecasts necessary to determine airport facility requirements for EIK include:

1. Based Aircraft
2. Based Aircraft by Type
3. General Aviation Operations
4. General Aviation Operations by Type
5. Aircraft Operations Mix
6. Peak Period Aircraft Operations
7. Instrument Aircraft Operations
8. Summary and Design Aircraft

3.2 Brief Economic Review

The previous chapter provided an inventory of aviation activity and conditions salient to an analysis of future aviation activity, but additional information is noted here as background and supplemental.

The U.S. economy began a decline in the summer of 2000 when manufacturing production dropped after numerous interest rate increases by the Federal Reserve Bank in an effort to combat inflation. Despite negative growth in other sectors of the economy, consumer spending kept the gross domestic product in positive territory. It was predicted that the country would not enter a recession and 2002 would bring positive growth. Contrary to the predictions the nation entered a

recession in March 2001. The economy recovered only to enter another at the end of 2007.

2008 brought many challenges for the nation's economy. Among these were rising interest rates and tightening credit conditions which caused a sharp decline in the housing market. The fourth quarter saw a dramatic decline in lending activity largely due to turmoil in the financial markets. Energy prices also rose substantially throughout the first half of the year. With the number of lost jobs on the rise, consumer spending began to decline. The automotive industry suffered as sales fell to the lowest numbers in 16 years. The housing sector was also hit hard, as both housing starts and residential investment experienced substantial declines throughout the year.

The economic growth forecast for 2009 was weak. Inflation was expected to decline and the unemployment rate to rise. 2008 and 2009 were predicted to be the slowest two-year growth period since the early 1980's. As predicted, 2009 proved to be another challenging year as unemployment numbers continued to climb reaching as high as 10 percent. Consumer confidence declined and spending reached a very low 0.7 percent for the first half of 2009. The housing sector continued to be very weak for the remainder of 2009. Vehicle sales were once again weak as they reached the lowest rate since the 1960's.

The national economy began to show positive growth in 2010 as the Gross Domestic Product increased in 48 states and the District of Columbia. This growth continued in the third and fourth quarters of 2011 at a rate of 1.8 percent and 3 percent respectively. The fourth quarter of 2011 saw the fastest growth since the second quarter of 2010. The national unemployment rate began a slow decline in 2011, and has yet reached pre-recession levels. Personal incomes



rose slightly in the fourth quarter of 2011 and consumer spending increased.

Economic consensus predicts moderate growth in 2012 and 2013.

3.2.1 Aviation

The aviation industry's growth significantly slowed following the terrorist attack of September 11, 2001, and again more recently with the 'great recession', spiking oil prices and the weak economy. After the terrorist attacks, air travel dropped as much as 50 percent but rebounded in a few years to about 75 percent of normal.

Current (late 2012) growth in the global economy is resulting in an increased demand for air travel. Industry growth over the next five years is expected to average 3.7 percent per year. As the economy continues to recover, the aviation industry predicts meaningful growth with passenger miles more than doubling over the next 20 years.

Prior to the 2008 recession, the National Business Aircraft Association (NBAA) reported that general aviation directly or indirectly employed over 1.26 million people nationwide, generated \$150 billion in economic activity. NBAA reported that the industry started feeling the effects of the downturn and has since laid-off over 12,155 employees, adjusting to the new economic realities. Thousands of additional jobs among suppliers and ancillary businesses and were also lost. Some general aviation manufacturers, including Adam Aircraft and Eclipse Aviation, have declared bankruptcy and ceased production.

FAA data indicated that overall general aviation traffic volumes in January 2009 were down 23% compared to January 2008. The same data reports a change in business jet operations of 28.3 percent for January 2009 compared to the same month within 2008, year-over-year. Aircraft

manufactures held a record backlog of \$83 billion at the end of the third quarter 2008, shrinking by \$6 to 7 billion each quarter.

At the same time, the used aircraft market was saturated with inventory levels for business jets reaching over 17 percent.

NBAA notes that fuel costs adversely impact local pilots, organizations and small businesses using general aviation. Historically, the general aviation community has paid nearly twice the price for fuel, than that paid by the commercial airlines. Reports from major fuel providers and aircraft charter companies have shown that when fuel prices increase, consumption and use decline significantly. A survey of aircraft operators from across the country has found that when fuel costs rise significantly, the purchase of turbine fuels falls by 10% to 20% and purchase of aviation gasoline (100LL) drops by 30% to 40%.

The impact of continuing price increases on the industry is visible in all parts of the country, and businesses continue to struggle with fuel prices uncertainty.

High fuel costs change operational behaviors.

3.3 General Economic Indications

Limited research was made for this planning to describe state and regional economic conditions, as these conditions are appropriate to consider in this chapter. The intent of this section is to identify recent and short-term economic trends which may inform aviation forecasting.

The State of Colorado, Office of Economic Development and Trade identifies the business climate indicators (data sources in parens):

- Colorado is ranked first for growth in the startup job sector (StartUpHire, 2012)
- Colorado is ranked the third best state for economic competitiveness (Beacon Hill Institute, 2012)



- Ft. Collins is ranked the third best place for business and careers (Forbes, 2012)
- Colorado ranks in the second tier of bioscience states (Battelle/BIO, 2012)
- Colorado is ranked fifth in entrepreneurial activity (2011 Kauffman Index of Entrepreneurial Activity)
- Colorado ranked third for state technology and science index (Milken Institute, 2011)
- Colorado ranked fifth on the clean energy leadership index (Clean Edge Inc.'s U.S. Clean Energy Leadership Index, 2012)
- Colorado ranked sixth for lowest state sales tax rates (Tax Foundation, 2012)
- Colorado is ranked the second best state for entrepreneurship and innovation (U.S. Chamber, 2012)
- Colorado is the second top state for high-tech business (TechAmerica 2012)
- Third most economically competitive state (Beacon Hill Institute, 2012)
- Third top state for business (CNBC, 2012)
- Fifth best state for business (Forbes, 2012)
- Best state for labor supply (Forbes, 2012)

3.3.1 Colorado-Based Business and Economic Research

A January 7, 2013 review of Colorado's economic and business climate and prospects was fielded by Colorado-based Business and Economic Research (CBER). CBER sources and draws conclusions from publicly-available data.

CBER notes "the Colorado economy mirrors the U.S. economy, experiencing five false starts (since the great recession) and has failed to show the sustained strong growth needed to significantly lower the unemployment rate.

It is questionable whether Colorado is performing better than the nation. BLS Wage and Salary Employment data suggests that Colorado is recovering faster than the nation. Colorado has added government jobs throughout the recovery while the U.S. has experienced declines." CBER notes that government employment data sources,

namely local area unemployment and current employment are seemingly telling different stories about the short-term employment picture."

CBER continues, "In 2012, there was good and bad news...trends that will carry into 2013:

- Colorado's population will continue to grow faster than employment. The population will increase by 77,500 people in 2013
- The Colorado housing market is outperforming the nation
- For the time being, gasoline prices have dipped
- The State's General Fund is on the rise again, with revenue projected to increase by 6.4% in the fiscal year ending June 2013, along with and projected gains of 4.2% and 4.1% in the upcoming two years
- At the end of 2012, more than 200,000 Coloradans will be out of work"

CBER expects that 2012 employment numbers will show the addition of 49,600 jobs, followed by an increase of 45,000 to 55,000 jobs in 2013.

3.3.2 State of Colorado Governor's Office of Planning and Budgeting

The State of Colorado Governor's Office of State Planning and Budgeting (OSPB) forecasts:

- "Non-Farm payroll jobs will increase 2.1 percent in 2012, but growth will slow to 1.2 percent in 2013 as the economy is expected to continue on its uneven growth path while it continues to rebuild. Outside forces, such as the federal government's fiscal issues and the European recession will temper hiring. Nationally, job growth will follow a similar pattern but will be slower."
- "Unemployment rates of 8.0 percent and 7.8 percent are forecast for Colorado in 2012 and 2013, respectively. The national unemployment rate will be 8.1 percent and 7.9 percent in 2012 and 2013."



- "Personal income will grow in Colorado at a rate of 4.3 percent in 2012 and 3.9 percent in 2013. Personal income for the nation will grow by 4.2 percent in 2012. The national growth rate will slow to 3.4 percent in 2013."
- "Total wages and salaries paid to all workers will grow in Colorado at a rate of 4.4 percent in 2012 and 3.3 percent in 2013 as job growth slows from the relatively strong pace in 2012. Similarly, total wages to workers nationwide will grow 4.2 percent in 2012. The national growth rate will slow to 3.1 percent in 2013."
- "Retail trade sales in Colorado will grow 5.6 percent in 2012 after increasing 7.3 percent in 2011. Growth will slow further in 2013 to 3.8 percent. Nationwide retail trade will grow at similar rates of 5.0 percent in 2012 and 3.4 percent in 2013."
- "The Denver-Boulder-Greeley Consumer Price Index is forecast to increase 2.1 percent in 2012 and 2.9 percent in 2013; nationally, consumer prices will increase 2.0 percent in 2012 and 2.6 percent in 2013."

3.3.3 Metro Denver Economic Development Corporation

The Metro Denver Economic Development Corporation (MDEDC) expects that its region will achieve full economic recovery in 2013, meaning that all jobs lost during the recent recession will be regained, and Metro Denver will begin a new growth path. MDEDC notes that "job growth in Metro Denver accelerated during 2012, and the year finished with stronger than expected employment, adding 34,500 jobs.

MDEDC notes that new residents, through migration, support important aspects of the economy, specifically residential real estate. The combination of high demand and low inventory may lead to a supply imbalance in Metro Denver's residential real estate market. MDEDC expects that existing home sales are forecast to continue

to grow, but at a slower 4.8 percent rate in 2013, compared to 17.5 percent in 2012.

MDEDC notes that "the United States endured a challenging political year, with elections and policy decisions overshadowing much of 2012. "Consumer confidence noticeably dipped, and businesses put off hiring and investment. While political leaders did reach a partial fiscal cliff deal, many decisions remain. Tax cuts for most Americans were reinstated, helping to boost optimism and assuage some economic worries of consumers. Analysts believe the worst of the foreclosure crisis is behind us, and the residential real estate market has been improving. Sales of homes are increasing, as are prices. While growth in the job market is expected, it will not be enough to decrease unemployment significantly."

MDEDC notes, "Economists believe that Colorado will remain a top-10 performing economy in 2013. Employment gains in 2012 outpaced the nation and should do the same in 2013. Colorado was the seventh-fastest growing state in terms of population between July 2011 and July 2012. Colorado's growing population will help keep the residential real estate market healthy, as demand increases for houses and apartments."

MDEDC expects that "the Metro Denver residential real estate market will continue to outperform the nation with decreasing foreclosures, increasing home prices, and strong new construction activity.

3.4 Socioeconomic Indications

A review of historical and projected socio-economic activity can provide insights into the future use of EIK. The following information summarizes population, employment, income, sales and other appropriate, aviation-correlative data important to providing reasonable guidance to estimate the future utilization of EIK.



A profile of the Town, by the Town, follows:

- Town Services: Police, Water, Sewer, Streets, Storm Drainage, Airport, Parks, Recreation, Open Space
- Form of Government: Board of Trustees/ Town Administrator
- Governing Body: Mayor elected at-large to a two-year term; six Trustees elected at-large to four-year terms
- 2011 Households: 6,758
- Median Household Income: \$99,804
- Median Age: 32.5
- Planning Area: 48 Square Miles
- Incorporated Area: 18 Square Miles
- Parks and Open Space: 346 Acres
- 2012 Operating Budget: \$28,975,841
- Town Employees: 258
- 2011 Total Town Mill Levy: 7.288
- 2011 Town Sales/Use Tax Rate: 3.5
- 802 Building Permits in 2011
- 33 Land Use Change Applications in 2011
- 371 Business Licenses Issued in 2011

A Town-website community profile notes the following:

Year	Population	5-Year Gain	Number of Households	5-Year Gain
2000	6,985	--	2,494	--
2005	14,044	101%	5,016	101%
2010	18,500	32%	6,485	29%
2015	25,650	39%	9,161	41%
2020	33,670	31%	12,025	31%
2025	40,680	31%	14,580	21%

Woods and Poole Economics, Inc. (WPE) is nationally-recognized firm specializing in long-term economic and demographic projections. Their data are widely-used by governments and business alike.

The majority of existing airport users reside in Boulder, Weld and Broomfield counties, the airport service area for purposes herein. Note that WPE does not maintain Broomfield data, but the Weld and Boulder data taken both separately and together provides a basis for forecasting, while State of Colorado data is used for

reference. WPE identifies their data sources and projection methodologies. Historical population, household and sales data (and projections therefrom) is sourced from the U.S. Census Bureau. Historical employment, earnings, income data (and projections therefrom) is sourced from the U.S. Bureau of Economic Analysis (BEA).

WPE notes that it formulates its proprietary county-based projections as the result of an integrated process. WPE makes county-based projections based upon US personal income, earnings by industry, employment by industry, population, inflation and other variables. Adjustments are made based upon lingering effects from the 2008/2009 recession. WPE then segregates the U.S. into 179 economic areas as identified by the US BEA. WPE employs an *export-base* approach which is used to project employment, and a subsequent earnings projection. The employment and earnings projections are then used to estimate population and households. Final steps involve proprietary reconciliation with population and county-level modifications to the projections.

Select WPE socioeconomic indicators are inventoried for historical and future years of consequence for this planning, as identified on Tables 3-1 and 3-2 and as depicted within Figure 3-1 and 3-2 on upcoming pages.

Complete data sources and methodologies are found within WPE's *2012 State of Colorado Profile; Technical Description*.

3.4.1 CU Medical Development

While specific planned developments may not always be stand-alone drivers of aviation activity, CU Health Sciences' recent acquisition of 66 anchoring acres within a planned 935 acres some 1.5 miles due east of EIK is noteworthy for its potential.



Table 3-1

Area Socioeconomics (Historic)

(Data Source: Woods and Poole Economics)

Population	2000	2005	5 Year % Change*	2010	10 Year % Change*	2012
Weld County	182,843	222,951	21.9 (4.05)	254,357	39.1 (3.91)	266,357
Boulder County	294,270	306,732	4.2 (0.85)	327,275	11.2 (1.12)	335,581
Colorado	4,326,921	4,631,888	7.0 (1.41)	5,049,071	16.7 (1.67)	5,207,349
Employment	2000	2005	5 Year % Change*	2010	10 Year % Change*	2012
Weld County	96,005	109,276	13.8 (2.76)	112,304	17.0 (1.70)	115,363
Boulder County	237,973	241,409	1.4 (0.29)	247,913	4.2 (0.42)	252,780
Colorado	2,926,408	3,031,017	3.6 (0.71)	3,083,142	5.4 (0.54)	3,128,857
Unemployed (%)	2000	2005	5 Year % Change*	2010	10 Year % Change*	2012
Weld County	3.47	5.57	60.5 (12.10)	10.18	193.4 (19.34)	
Boulder County	3.7	4.51	21.9 (4.38)	7.15	93.2 (9.32)	
Colorado	3.83	5.12	33.7 (6.74)	8.92	132.9 (13.29)	
Earnings (\$) **	2000	2005	5 Year % Change*	2010	10 Year % Change*	2012
Weld County (000)	3,551,187	4,377,452	23.3 (4.65)	4,348,958	22.5 (2.25)	4,646,429
Boulder County (000)	12,464,310	12,285,270	-1.4 (-0.29)	12,136,240	-2.6 (-0.26)	1,280,625
Colorado (000)	132,997,100	146,436,700	10.1 (2.02)	149,795,200	12.6 (1.26)	157,808,200
Personal Income (\$) **	2000	2005	5 Year % Change*	2010	10 Year % Change*	2012
Weld County (000)	5,204,621	6,006,771	15.4 (3.08)	6,510,584	25.1 (2.51)	6,965,964
Boulder County (000)	13,421,510	14,199,160	5.8 (1.16)	14,667,996	9.3 (.93)	15,233,790
Colorado (000)	163,801,200	179,695,600	9.7 (1.94)	196,576,612	20.0 (2.00)	207,224,100
Per Capita (\$) **	2000	2005	5 Year % Change*	2010	10 Year % Change*	2012
Weld County	28,465	26,942	-5.4 (-1.07)	25,596	-10.1 (-1.01)	26,153
Boulder County	45,609	46,292	1.5 (0.30)	44,819	-1.7 (-0.17)	45,395
Colorado (000)	37,856	38,795	2.5 (0.50)	38,933	2.8 (0.28)	39,795
Households	2000	2005	5 Year % Change*	2010	10 Year % Change*	2012
Weld County	64,006	80,559	25.9 (5.17)	89,899	40.5 (4.05)	95,097
Boulder County	115,943	125,234	8.0 (1.60)	131,857	13.7 (1.37)	136,501
Colorado	1,669,444	1,842,746	10.4 (2.08)	1,980,771	18.6 (1.86)	2,058,768
Retail Sales (\$) **	2000	2005	5 Year % Change*	2010	10 Year % Change*	2012
Weld County (000)	1,802,899	2,314,153	28.4 (5.67)	2,408,422	33.6 (3.36)	2,669,878
Boulder County (000)	4,585,336	4,998,869	9.0 (1.80)	4,865,549	6.1 (0.61)	5,281,471
Colorado (000)	618,738,300	692,632,900	11.9 (2.39)	689,875,900	11.5 (1.15)	751,778,900

*Overall 5 and 10-year percentage change from 2000 baseline; average annual percentage change in parens; ** 2005 dollars.



Table 3-2

Area Socioeconomics (Projected)

(Data Source: Woods and Poole Economics)

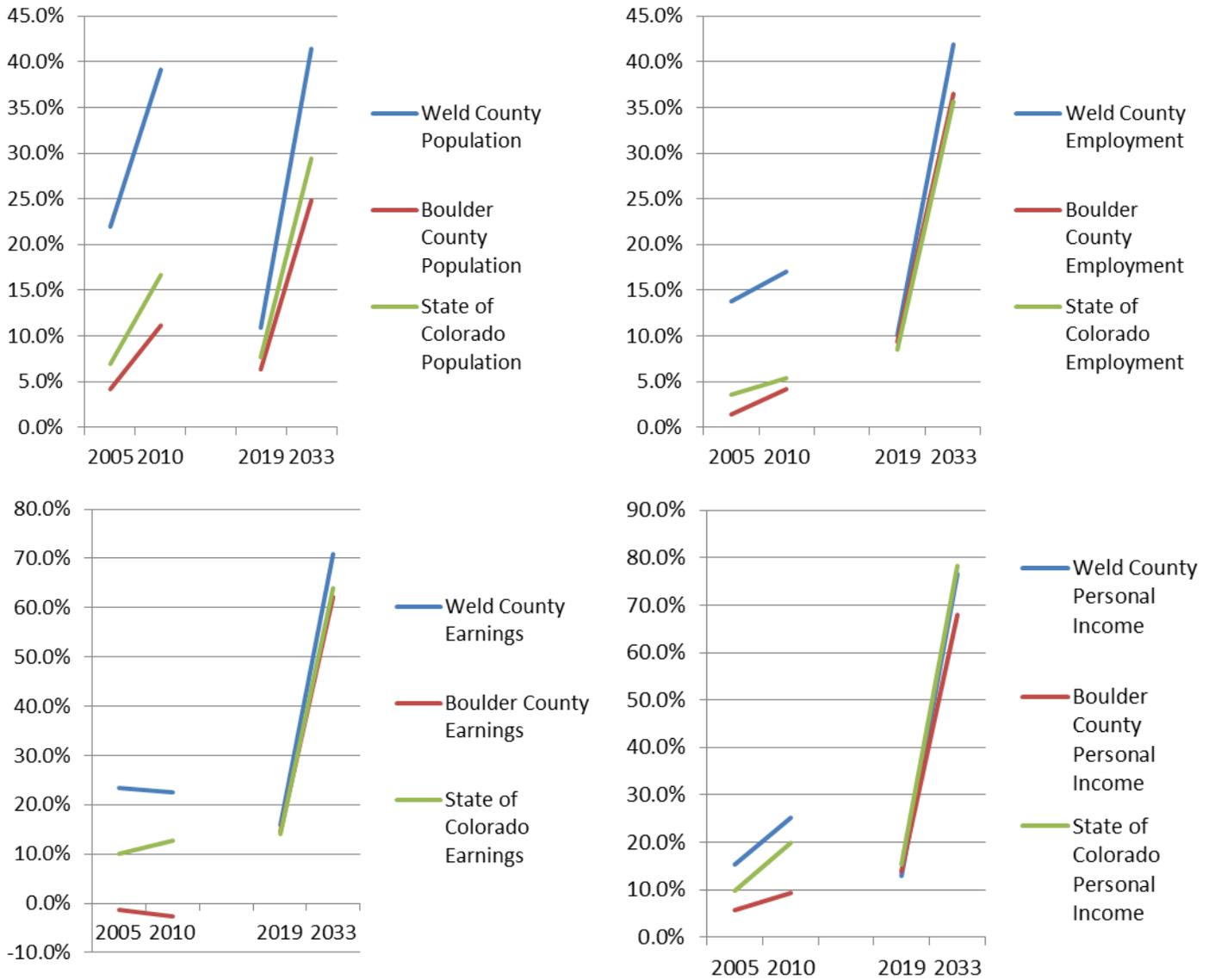
Population	2014	2019	5 Year % Change*	2033	20 Year % Change*
Weld County	278,494	308,958	10.9 (2.19)	393,820	41.4 (2.07)
Boulder County	344,180	366,233	6.4 (1.28)	429,463	24.8 (1.24)
Colorado (000)	5,369,555	5,781,582	7.7 (1.53)	6,947,815	29.4 (1.47)
Employment	2014	2019	5 Year % Change*	2033	20 Year % Change*
Weld County	119,990	132,137	10.1 (2.02)	170,311	41.9 (2.10)
Boulder County	262,348	286,891	9.4 (1.87)	358,193	36.5 (1.83)
Colorado	3,234,117	3,510,218	8.5 (1.71)	4,389,851	35.7 (1.79)
Earnings (\$)***	2014	2019	5 Year % Change*	2033	20 Year % Change*
Weld County (000)	4,933,249	5,714,783	15.8 (3.17)	8,428,946	70.9 (3.54)
Boulder County (000)	13,545,230	15,521,630	14.6 (2.92)	21,954,970	62.1 (3.10)
Colorado (000)	166,443,950	189,952,400	14.1 (2.82)	272,859,200	63.9 (3.20)
Personal Income (\$)***	2014	2019	5 Year % Change*	2033	20 Year % Change*
Weld County (000)	7,631,616	8,626,285	13.0 (2.61)	13,475,370	76.6 (3.83)
Boulder County (000)	15,824,835	18,041,485	14.0 (2.80)	26,564,910	67.9 (3.39)
Colorado (000)	216,955,700	250,443,800	15.4 (3.09)	386,911,300	78.3 (3.92)
Per Capita (\$)***	2014	2019	5 Year % Change*	2033	20 Year % Change*
Personal Income	2014	2019	5 Year % Change*	2033	20 Year % Change*
Weld County	26,434	27,921	5.6 (1.13)	34,219	29.5 (1.47)
Boulder County	45,978	49,262	7.1 (1.43)	61,856	34.5 (1.73)
Colorado	40,405	43,318	7.2 (1.44)	55,688	37.8 (1.89)
Households	2014	2019	5 Year % Change*	2033	20 Year % Change*
Weld County	100,537	113,537	12.9 (2.59)	143,269	42.5 (2.13)
Boulder County	141,519	153,209	8.3 (1.65)	177,724	25.6 (1.28)
Colorado	2,142,052	2,337,166	9.1 (1.82)	2,754,685	28.6 (1.43)
Retail Sales(\$)**	2014	2019	5 Year % Change*	2033	20 Year % Change*
Weld County (000)	2,850,780	3,332,810	16.9 (3.38)	4,953,243	73.8 (3.69)
Boulder County (000)	5,553,763	6,202,931	11.7 (2.34)	8,480,880	52.7 (2.64)
Colorado (000)	790,266,500	893,281,900	13.0 (2.61)	1,241,970,000	57.2 (2.86)

*Overall 5 and 20-year percentage change from 2014 baseline; average annual percentage change in parens; ** 2005 dollars.



Figure 3-1
Area Socioeconomics (Population, Employment, Earnings, Personal Income)

(Visualization: ADG)

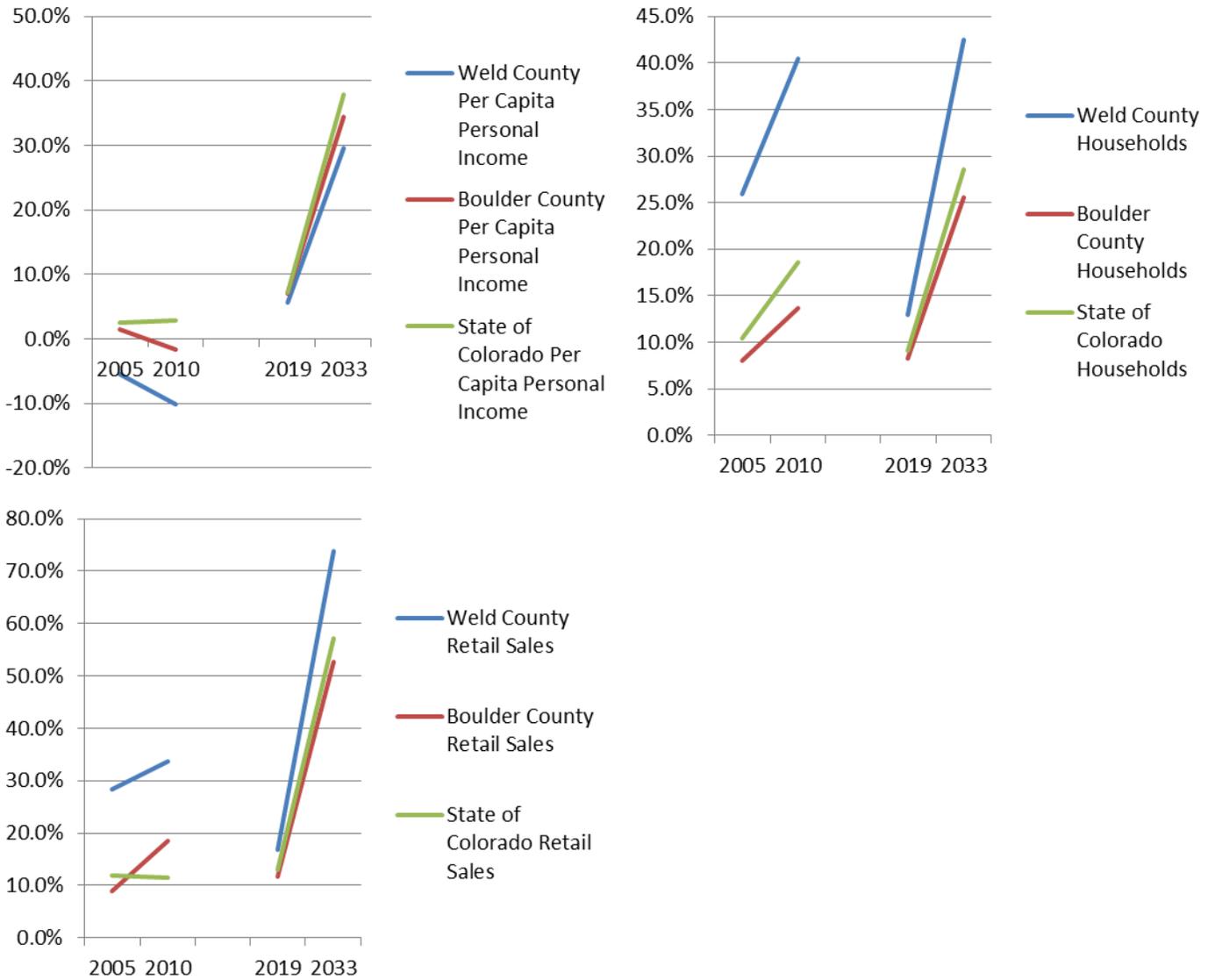


Note: Historic from 2000 baseline, Projected from 2014 baseline



Figure 3-2
 Area Socioeconomics (Per Capita Personal Income, Households, Retail Sales

(Visualization: ADG)



Note: Historic from 2000 baseline, Projected from 2014 baseline



3.5 Aviation-Related Indications

Although area socioeconomic data often closely correlates aviation activity, more direct measures of aviation industry activity are germane.

3.5.1 EIK Fuel Sales

Fuel dispensed at EIK was inventoried from available data, as shown in Table 3-3 and Figure 3-3, and a simple linear regression for planning forecast years of consequence was made. Q1

data was incomplete so an estimate based upon future year's Q1 take of the yearly total was made. Note that the percentage change data used this 2008 derived estimate as baseline.

Table 3-4 and Figure 3-4 in the following page identify and depict the forecast percentage changes in the number of based aircraft and general aviation operations from previous master planning work at select other area airports.

Table 3-3

Fuel Dispensed and Projection

(Data Source: Vector Air)

Fuel Inventory	2008*	2009	2010	2011	2012
Jet-A	29,643	35,732	28,054	36,075	30,485
100LL	53,811	66,720	71,147	65,915	62,977
Total	83,454	102,452	99,201	101,990	93,462
Fuel Projection	2014	2019	<i>5-Year % Change</i>	2033	<i>20-Year % Change</i>
Jet-A	32,809	30,925	-3.5	29,220	-10.9
100LL	55,600	75,516	19.9	122,586	120.5
Total	88,408	106,440	13.9	151,805	71.7

*Q1 2008 data incomplete; estimated based upon subsequent years' data. Overall 5 and 20-year change from 2014 baseline.

Figure 3-3

Fuel Dispensed and Projection

(Visualization: ADG)

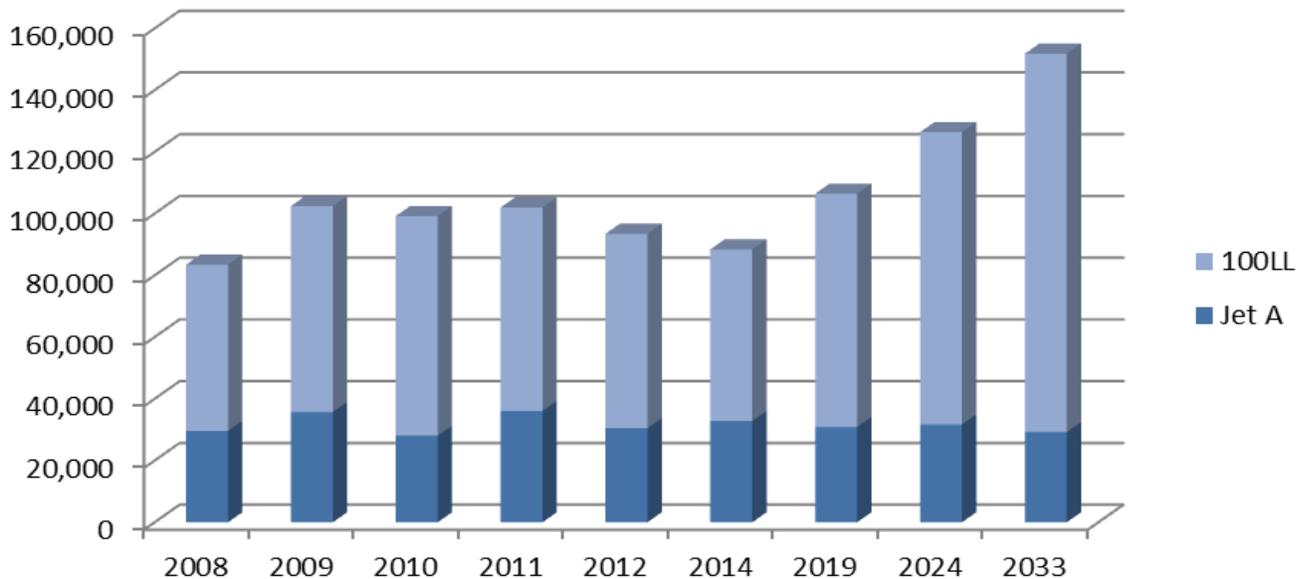
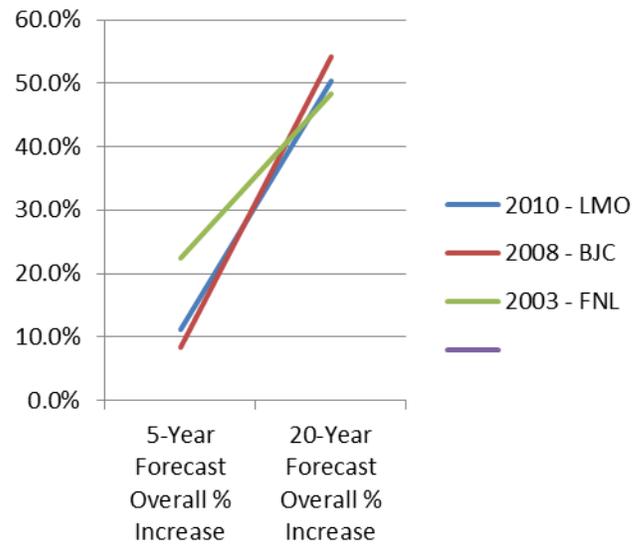
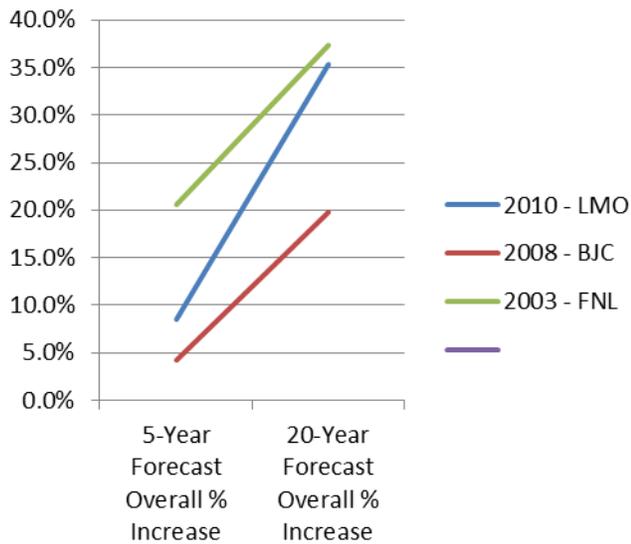


Table 3-4/Figure 3-4
Area Airports Based Aircraft and Aircraft Operations Forecasts

(Source: ADG)

Based Aircraft Forecast; Year and Airport	5-Year Forecast Overall % Increase	20-Year Forecast Overall % Increase	Aircraft Operations Forecast; Year and Airport	5-Year Forecast Overall % Increase	20-Year Forecast Overall % Increase
2010 - LMO	8.5%	35.3%	2010 - LMO	11.1%	50.4%
2008 - BJC	4.2%	19.8%	2008 - BJC	8.3%	54.1%
2003 - FNL	20.6%	37.3%	2003 - FNL	22.5%	48.4%



3.5.2 CDOT Aviation System Plan

CDOT's 2011 Aviation System Plan forecasted based aircraft for EIK (from 2014 as baseline; interpolated and rounded):

EIK Based Aircraft From State Plan	Forecast New Based Aircraft	Percent Change from 2014 baseline
2019	3	1.57%
2033	17	8.90%

CDOT's 2011 Aviation System Plan forecast aircraft operations for EIK (from 2014 as baseline; interpolated and rounded):

EIK Aircraft Operations From State Plan	Forecast New Aircraft Operations	Percent Change from 2014 baseline
2019	1,540	3.2%
2033	6,462	13.7%

Note that the *System Plan* employed forecast methodologies for based aircraft and aircraft operations based upon FAA's *FAA Aerospace Forecasts for Fiscal Years 2011-2031*, which the *System Plan* characterizes as 'pessimistic' for the majority of aircraft operating at EIK. More specifically, the *System Plan* primarily based its forecasts upon these FAA-derived average annual growth rates (AAGRs):

Aircraft Class	AAGR
Single-Engine Piston	0.2%
Multi-Engine Piston	-0.9%
Jet	3.1%
Helicopter	2.6%
Glider	-0.1%
Sport	3.4%
Experimental	1.4%



The *System Plan* notes:

- EIK forecast general aviation operations were adjusted downward from the system-wide projections based upon 'overall trends at towered airports',
- The expected growth rate of based aircraft at EIK is among the top 9 airports growth rates in the state.
- In 2010, EIK accommodated 4.2 percent of all state general aviation operations, the sixth busiest airport in the state, in terms of this metric.
- In 2010, EIK accommodated 3.4 percent of all Colorado-based aircraft, the ninth busiest airport in the state, in terms of this metric.

3.5.3 FAA Forecasts

FAA Aerospace Forecasts Fiscal Years 2013-2033 is the recent edition of this annually updated forecasting document. This document notes:

"As the economy {national} recovers from the most serious economic downturn and slow recovery in recent history, aviation will continue to grow of the long run. Fundamentally, demand for aviation is driven by economic activity."

Its review of the year 2012 notes:

"The general aviation market showed an improvement...single engine piston shipments recovered from their negative trend to a 0.9 percent increase over the previous year...while total piston aircraft shipments were relatively flat, with a 0.3 percent increase. Turbine aircraft shipments by U.S. manufacturers increased by 6.2 percent {year over year}. Turboprop shipments, which increased by 16.2 percent {year over year} accounted for the growth in turbine shipments, as there was a 4.7 percent decline in business jet shipments. General aviation activity at FAA and contract towers increased 0.6 percent {year over year} driven by local operations."

This document indicates that general aviation manufacturing declined significantly following the

year 2008 economic challenges and recovery has been tenuous:

- U.S general aviation aircraft shipments decreased from 3,079 units in 2008 to 1,334 units in 2010, and the estimated year 2012 quantity is 1,514.
- U.S general aviation aircraft billings decreased from \$13.3± billion in 2008 to \$7.9± billion in 2010 and the estimated year 2012 quantity is \$8.0± billion.

FAA Aerospace Forecasts indicates the U.S Gross Domestic Product (GDP) Year-Over-Year (YOY) increases (*from IHS Global Insight*):

U.S Projected GDP	% YOY Increase
2013	1.7%
2014	2.6%
2015	3.4%
2016	3.0%
Years 2017 through 2033	2.5%

And, U.S Real Disposable Income (RDI) Year-Over-Year (YOY) increases (*from IHS Global Insight*):

U.S Projected RDI	% YOY Increase
2013	2.0%
2014	3.0%
2015	3.1%
2016	2.9%
Years 2017 through 2033	2.4%

FAA Aerospace Forecasts forecast a 20-year AAGR of 0.5 percent in the aggregate general aviation fleet, with a 2.8 percent 20-year AAGR in turboprop and rotorcraft. An average annual percent decrease of 0.2 and 0.6 percent in the active single-engine piston and multi-engine fleet respectively, is forecast through the year 2033. FAA defines active in this context as "an aircraft which flies at least one hour during the year."

FAA Aerospace Forecasts indicates an AAGR of 3.2 percent through 2013 and 2.0 percent through the 20-year period for active light-sport aircraft.



FAA Aerospace Forecasts indicates that the number of general aviation hours flown is projected to increase by an AAGR of 1.6 percent over the forecast period. Also indicated is that the number of turbine general aviation hours flown is projected to increase by an AAGR of 3.3 percent over the forecast period.

FAA Aerospace Forecasts indicates commercial pilot certification issuance at an AAGR of 0.6 percent, while the number of student pilots are forecast to decreased at an AAGR of 0.1 percent and the number of private pilots is expected at an AAGR of 0.2 percent.

FAA Aerospace Forecasts indicates that FAA's general aviation-related workload increased by 0.6 percent, the first increase since the year 2008. *FAA Aerospace Forecasts* indicates that FAA's general aviation-related workload is forecast at an AAGR of 0.4 percent through the 20-year period.

Finally, *FAA's Report to Congress National Plan of Integrated Airport Systems (NPIAS) 2013-2017* is the recent edition of this annually updated document. This document, in Chapter Three, identifies forecast general aviation fleet and hours flown via *FAA Aerospace Forecasts*.

3.6 Based Aircraft Forecasting

The FAA-Approved number of based aircraft at EIK, for purposes of this planning totals 191, distributed as follows:

- 173 single-engine
- 9 multi-engine
- 2 jet
- 7 helicopter

EIK has many positive features and services its local pilot and business communities well. National economic circumstances have slowed the growth of general aviation and the industry continues, like national economy, to await a more substantial rebound. Most local and regional

indications point to more robust projections of future based aircraft as probable.

This based aircraft count per FAA's TAF is dissimilar to the count derived for this planning; current counts on the field were verified.

3.6.1 Based Aircraft Projections

Indicators with statistical correlations to aviation activity are used to project the number of based aircraft as shown in Table 3-5, Figure 3-5 and Figure 3-6.

The Population, Earnings, Per Capital Personal Income (PCPI) and Retail Sales Projections are the average of the Weld and Boulder County WPE figures found within Table 3-2. The EIK Fuel Sales Projection is a repeat of figures within Table 3-3. The Area Airports Projection is the average of the forecasting done for other planning for LMO, BJC and FNL. The CDOT Projection is via the newly updated *System Plan*, and the FAA Projection is from *FAA Aerospace Forecasts* for single-engine aircraft. Finally, the Average Projection is the simple mean of the previous projections.

The projections group nicely in terms of large, intermediate and low values. The projections which produce large values are regionally-currency related: Earnings, Retail Sales and EIK Fuel. The projections which produce intermediate values are somewhat regional, being people and aviation-related: PCPI, Population, Area Airports and the Average Projection. The projections which produce low values are somewhat nationally aviation-related: CDOT and FAA.

These projections seemingly suggest:

- Regional local aviation demand could surpass national expectations
- The national and regional aviation industry has yet to see a full recovery



Table 3-5
Based Aircraft Projections

(Data Source: Various)

Projection	5-Year Forecast Overall Increase	Projected Number of Based Aircraft	20-Year Forecast Overall Increase	Projected Number of Based Aircraft
Population	8.6%	208	33.1%	254
Earnings	15.2%	220	66.5%	318
PCPI	6.3%	203	32.0%	252
Retail Sales	14.3%	218	63.2%	312
EIK Fuel	13.9%	218	71.7%	328
Area Airports	11.1%	212	30.8%	250
CDOT	1.02%	193	8.9%	208
FAA	-1.05%	189	-4.2%	183
Average	8.7%	208	37.8%	263

Figure 3-5
Based Aircraft Projections

(Visualization: ADG)

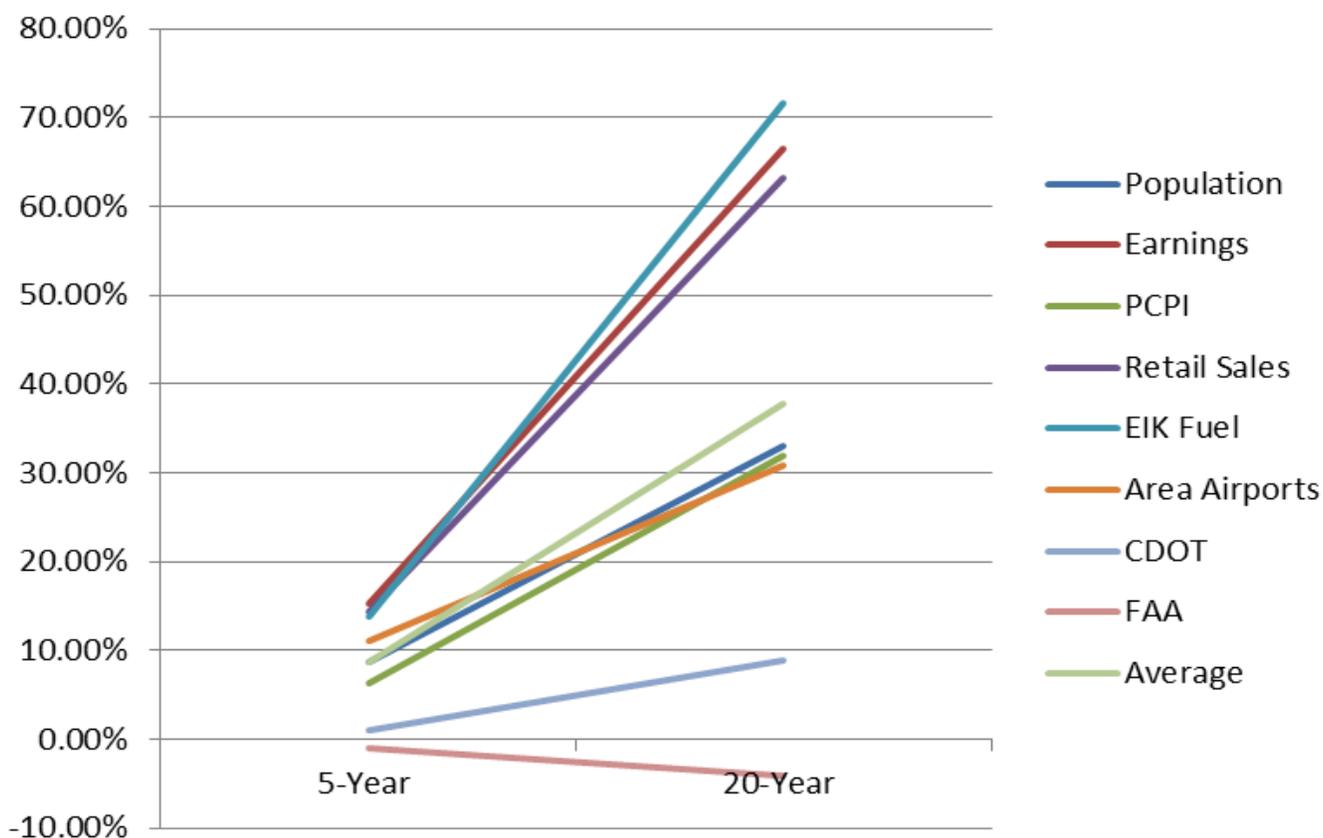


Figure 3-6
Based Aircraft Resulting from Projections

(Visualization: ADG)

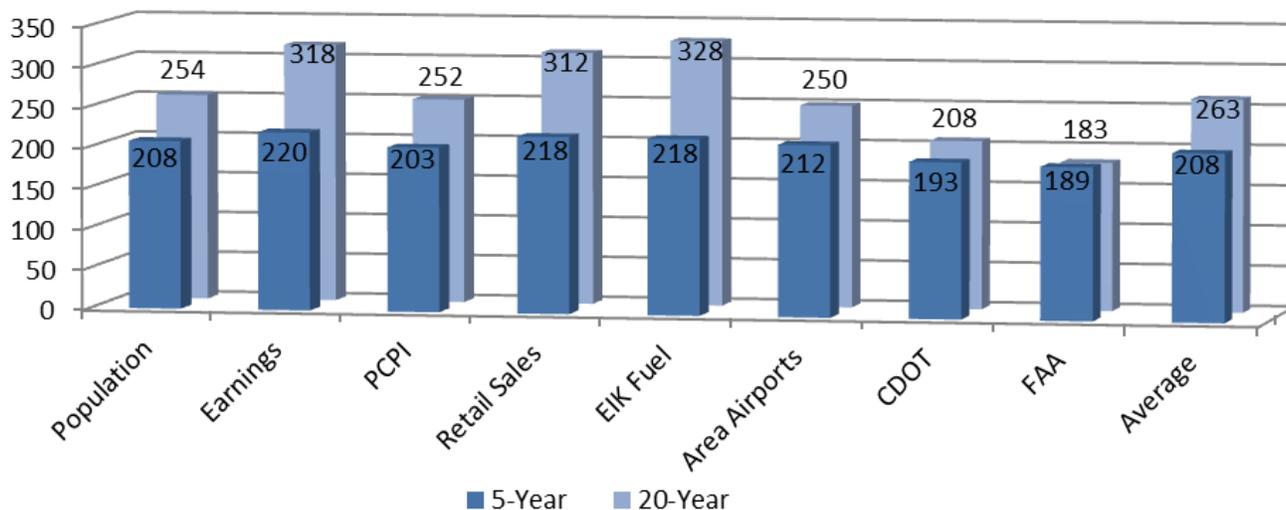


Figure 3-6 above shows the resulting number of based aircraft derived as a consequence of the projections.

3.6.2 Based Aircraft Forecast

A forecast of based aircraft can be taken from one of the above, or a combination of projections. In the consultant's opinion there is no need for extravagant statistical efforts given the nature and scope of EIK's aviation activity.

A bit of optimism is in order:

- EIK fuel sales, and other regional economic measures, have been robust in the face of strong national economic headwinds in recent years.
- The Town and surrounding municipalities have several large multi-use developments which may stimulate participation in the aviation marketplace.
- EIK hangar space is at capacity as is space at some other area airports, with a strong preference to enclose aircraft storage

- The aviation industry, just very recently has shown signs of renewal.

These are perhaps quantified within the larger-value projections.

However, a bit of trepidation is also in order:

- Rising fuel and aircraft acquisition costs serve to decrease aviation activity
- Economic uncertainties persist at the national level and will likely remain of concern for the aviation industry. Examples include potential terrorism, and seemingly unforeseeable financial and monetary events

These are perhaps quantified within the lower-value projections.

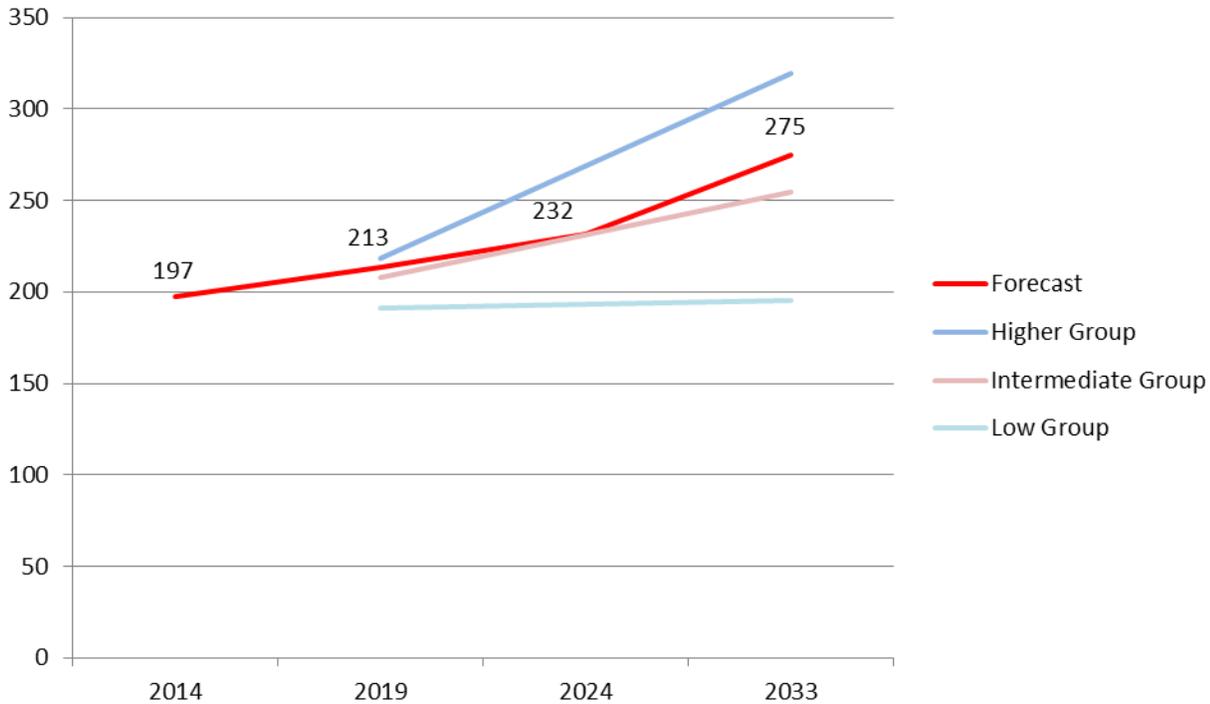
On balance, reason exists for a bit of optimism, but likely within a standard statistical dispersion. The Average Projection is a 'middle of the road' compromise between the lower CDOT and FAA Projections and the more robust Earnings and EIK Fuel Projections. Optimism is quantified for purposes herein by finding a based aircraft

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Figure 3-7
Forecast of Based Aircraft

(Visualization: ADG)



forecast within the 'high sides' of Average Projection's standard deviation of 5.7 for the 5-year forecast period and 25.8 for the 20-year forecast period.

The Forecast of Based Aircraft is shown on Figure 3-7 in red. This forecast is a simply 1.6 percent annual growth each year, beginning with the 2012 count of 191 aircraft, until 2024 and then 1.9 percent to the final forecast year. Summarily:

Period	AAGR	Overall
2014-2018	1.6%	8.3%
2019-2023	1.6%	8.6%
2024-2033	1.9%	18.4%
<i>2014-2033</i>	<i>1.7%</i>	<i>39.2%</i>

The higher grouping is the simple mean of the Earnings, Retail Sales and EIK Fuel projections. The intermediate grouping is the simple mean of the PCPI, Population, Area Airports and the Average Projection. The low grouping is the simple mean of the CDOT and FAA Projections. These projections were not selected because

other regional-correlative economic conditions are noteworthy.

New based aircraft will likely come to EIK when new hangar capacity is built. And, new hangars may be built, be they T- or box- types, by either the Town or a tenant when demand is likely sufficient to fill space at a given price. The result of this, for example, is that the based aircraft count will jump 10 percent when a new T-hangar is built and occupied.

3.6.3 Based Aircraft Forecast by Type

A further segregation of based aircraft by type is necessary to meaningfully complete this section. This subsection relies on information contained in CDOT and FAA forecasting materials previously discussed. These materials suggest that future aviation activity in general, is likely more robust for in the multi-engine, jet and helicopter types, as opposed to the single-engine type. Figures on the following page repeat earlier data.

Aircraft Type	CDOT AAGR	FAA AAGR
Single-engine	0.2%	-0.2%
Multi-engine	-0.9%	-0.6%
Turboprop	--	2.8%
Jet	3.1%	3.3%
Rotor	2.6%	2.8%
Sport	3.4%	2.0%

Generally speaking, FAA and CDOT data expect that more sophisticated, expensive aircraft will outnumber less expensive aircraft in the future, with the notable exception of the Sport aircraft category. Based upon these data, use of EIK by larger, faster and more expensive aircraft is expected to increase over the next 20 years,

especially relative to use by smaller piston-driven aircraft. Private/business ownership of these larger aircraft is also noteworthy due to the significant decrease in acquisition costs. These factors are considered in the formulation of the based aircraft forecast by type. The following annual growth rates are used and are reflected in Table 3-6 and Figure 3-8.

Aircraft Type	Rate
Single-engine	0.2%
Multi-engine	-0.6%
Jet	3.3%
Helicopter	2.6%

Table 3-6
Forecast of Based Aircraft by Type

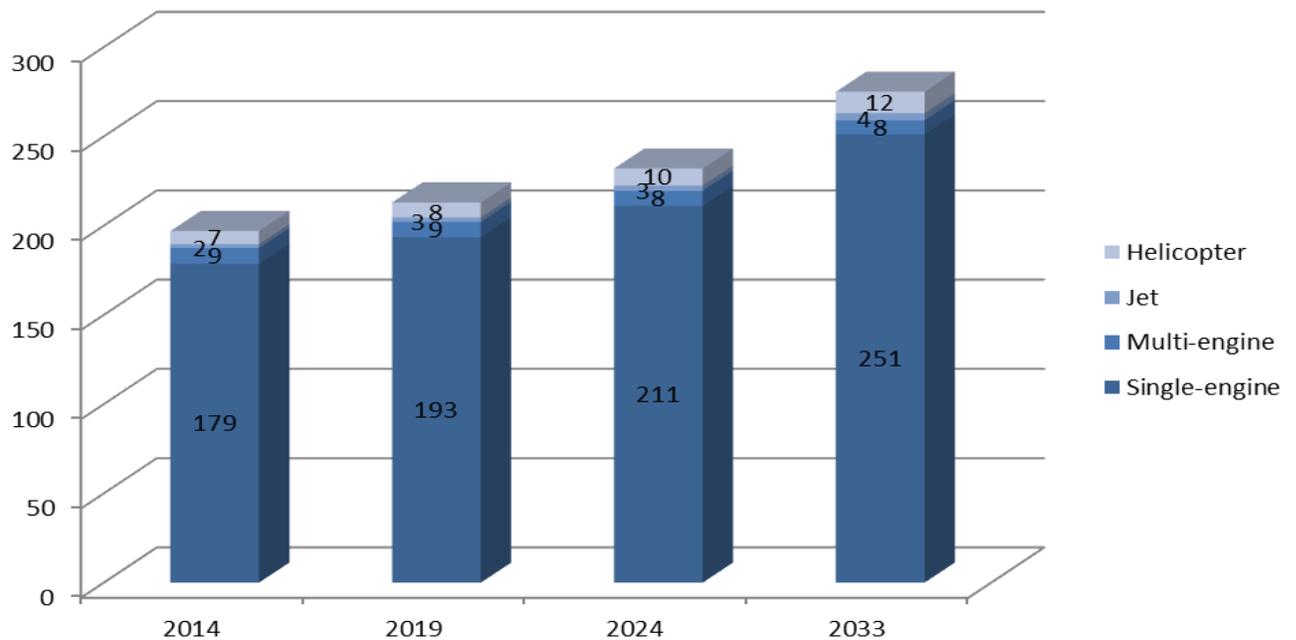
(Estimate Source: ADG)

Aircraft Type	2014	2019	2024	2033
Single-engine	179	193	211	251
Multi-engine	9	9	8	8
Jet	2	3	3	4
Helicopter	7	8	10	12
Total Based Aircraft	197	213	232	275

Figure 3-8

Forecast of Based Aircraft by Type

(Visualization: ADG)



Lastly, the single-engine based aircraft count was then increased to conform to the based aircraft forecast shown in Figure 3-7, generating an annual growth rate of 2.2%. For purposes of the forecast, sport is grouped with single-engine and turboprop is grouped with jet.

3.7 Aircraft Operations Forecasting

EIK is an uncontrolled facility and good counts of aircraft operational activity are not available. The number of aircraft operations has been stable, but likely decreasing in the past five years, as most Denver metro area airports, according to FAA.

As previously detailed, general aviation as an industry has struggled over the past few years with the economic headwinds and aircraft production and sales have declined in most categories of aircraft manufacture, including executive aircraft. Larger business and charter general aviation aircraft are expected to fly only slightly more hours on a national basis. However, it is anticipated that itinerant general aviation operations will continue to increase and that local operations will, as well.

The FAA-approved, estimated number of year 2012 aircraft operations, for purposes of this panning, total 47,000, estimated to be distributed as follows; Single-engine: $\pm 84\%$ (39,500), Multi-engine: $\pm 6\%$ (2,800), Jet: $\pm 3\%$ (1,400), Helicopter: $\pm 7\%$ (3,300). It is noteworthy that these baseline counts are substantially less than those identified in FAA's TAF or CDOT estimates. Section 2.7 describes existing count inadequacies from multiple sources and defines the proposed count modification for baseline purposes.

3.7.1 Aircraft Operations Projections

Indicators with statistical correlations to aviation activity are used to project the number of based aircraft as shown in Table 3-7, Figure 3-9 and

Figure 3-10. Many of the same indicators used to the number of based aircraft are also relevant to aircraft operations projections as statistical correlations continue to exist.

The Earnings, Per Capital Personal Income (PCPI) and Retail Sales Projections are the average of the Weld and Boulder County WPE figures found within Table 3-2. The Earnings and PCPI Projections become more correlative, while the Retail Sales Projection becomes less so. The EIK Fuel Sales Projection is a repeat of figures within Table 3-3. Modifications are made for aircraft operations projections in two instances:

- The Area Airports Projection is modified with aircraft operations projections
- The FAA Projection is modified to include general aviation hours flown as opposed to the number of ambient aircraft.

The visual results of the modifications are somewhat similar to Figure 3-5; however, the projections no longer group nicely in terms of large, intermediate and low values. The projections which produce high values are regionally-currency related: Earnings, Retail Sales and EIK Fuel, Area Airports and the Average. The projections which produce low values are somewhat nationally aviation-related: CDOT, PCPI, and FAA.

These projections seemingly suggest:

- Regional local aviation demand could surpass national expectations
- The national and regional aviation industry has yet to see a full recovery
- Future aircraft operations activity is expected to be more robust than basing activity, given that the Average Projection's values have increased.

Figure 3-10 shows the resulting number of based aircraft derived as a consequence of the projections.

Table 3-7

Aircraft Operations Projections

(Data Source: Various)

Projection	5-Year Forecast Overall Increase	Projected Number of Aircraft Operations	20-Year Forecast Overall Increase	Projected Number of Aircraft Operations
Earnings	15.2%	54,144	66.5%	78,255
PCPI	6.3%	49,985	32.0%	62,040
Retail Sales	14.3%	53,721	63.2%	76,728
EIK Fuel	13.9%	53,533	71.7%	80,699
Area Airports	30.8%	61,476	50.9%	70,951
CDOT	3.2%	48,504	13.7%	53,439
FAA	8.0%	50,760	32.0%	62,040
Average	13.1%	53,160	47.2%	69,165

Figure 3-9

Aircraft Operations Projections

(Visualization: ADG)

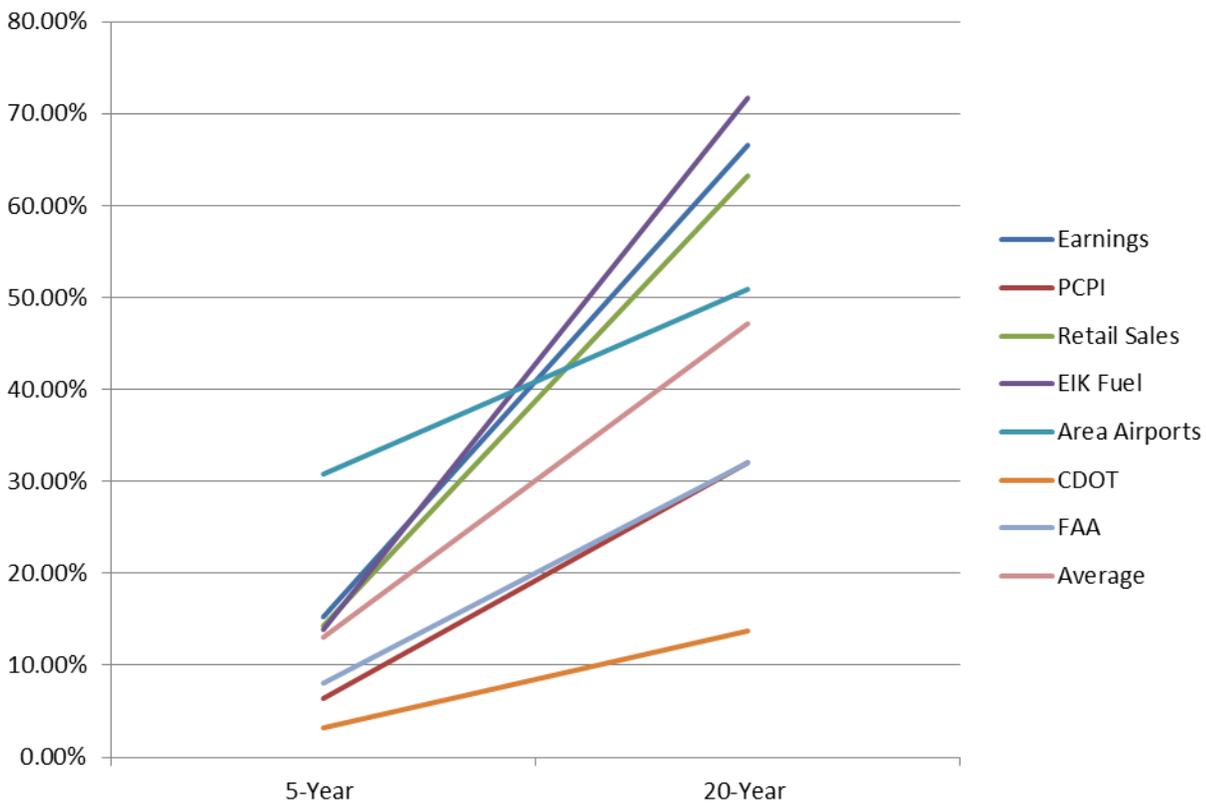
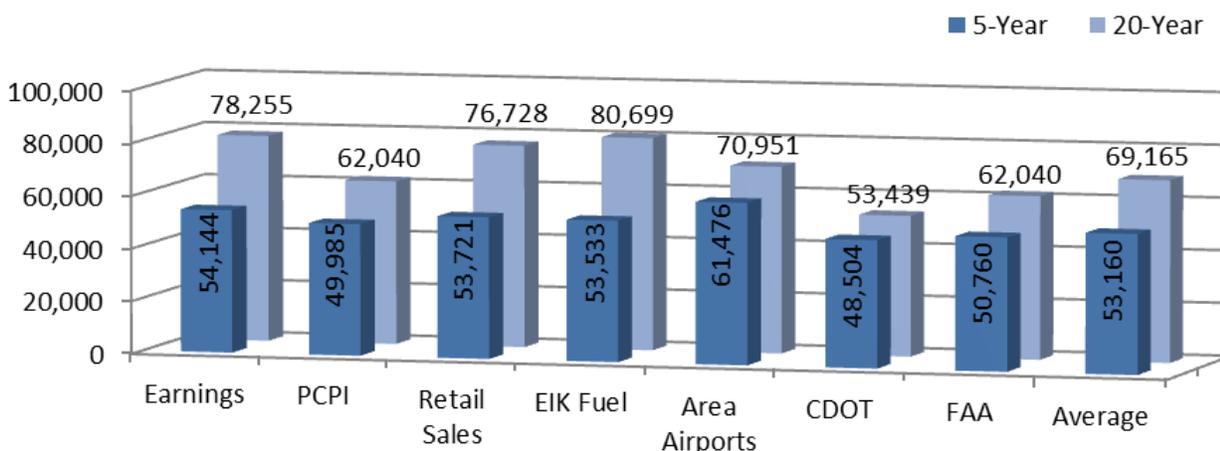


Figure 3-10
Aircraft Operations Resulting from Projections

(Visualization: ADG)



3.7.2 Aircraft Operations Forecast

A forecast of aircraft operations can be taken from one of the above, or a combination of projections. In the consultant's opinion there is no need for extravagant statistical efforts given the nature and scope of EIK's aviation activity.

A bit of long-term optimism, may be in order:

- EIK fuel sales, and other regional economic measures, have been robust in the face of strong national economic headwinds in recent years.
- The Town and surrounding municipalities have several large multi-use developments which may stimulate participation in the aviation marketplace.
- The aviation industry, just very recently has shown signs of renewal.

These are perhaps quantified within the higher value projections.

And, a bit of trepidation may also be in order in the short-term:

- Rising fuel and aircraft acquisition costs serve to decrease aviation activity

- Economic uncertainties persist at the national level and will likely remain of concern for the aviation industry. Examples include potential terrorism, and seemingly unforeseeable financial and monetary events

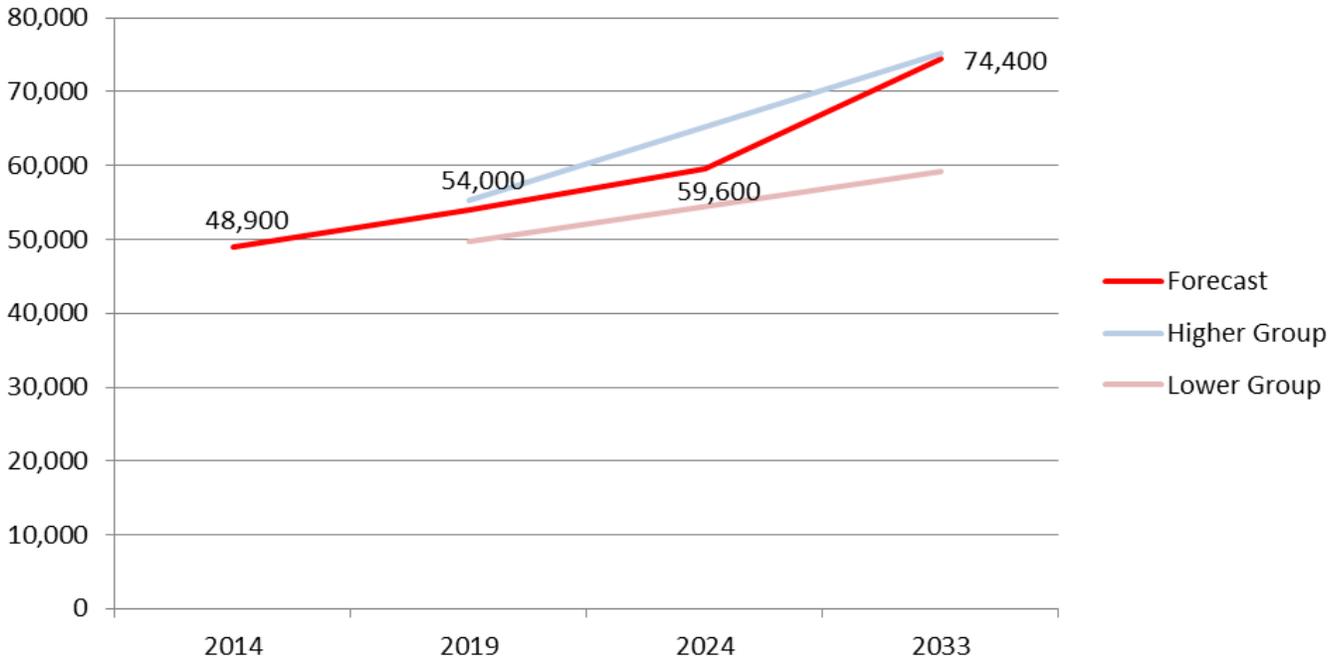
These are perhaps quantified within the lower-value projections.

On balance, reason exists for a bit of optimism, but likely within a standard statistical dispersion. The Average Projection is a 'middle of the road' compromise between the lower PCPI, CDOT and FAA Projections and the other more robust projections. Optimism is quantified for purposes herein by finding an aircraft operations forecast within the 'high side' of the Average Projection's standard deviation of 3,929 for the 5-year forecast period and within the 'high side' of the projections standard deviation of 9,448 for the 20-year forecast period. FAA and CDOT projections were not selected because other regional-correlative economic conditions are noteworthy.



Figure 3-11
Aircraft Operations Forecast

(Visualization: ADG)



The Forecast of Aircraft Operations is shown on Figure 3-11. This forecast is a simply 2.0 percent annual growth each year, beginning with the 2012 FAA-approved aircraft operations estimate of 47,000 aircraft until 2024, and then 2.5 percent annually to the final forecast year. The marginal increase operations in the final planning period is suggested in *FAA Aerospace Forecasts*, wherein it is noted that (Section 3.5.3) "As the economy {national} recovers from the most serious economic downturn and slow recovery in recent history, aviation will continue to grow of the long run." Each value is rounded to the nearest 100. Summarily:

Period	AAGR	Overall
2014-2018	2.0%	10.4%
2019-2023	2.0%	10.4%
2024-2033	2.5%	24.8%
<i>2014-2033</i>	<i>2.2%</i>	<i>52.1%</i>

The lower grouping is the simple mean of the FAA, CDOT and PCPI projections. The low

grouping is the simple mean of the remaining projections.

3.7.3 Forecast Aircraft Operations by Type

A further segregation of forecast aircraft operations by type is necessary to meaningfully complete this section. This subsection relies heavily on information contained in CDOT and FAA forecasting materials previously discussed. These materials suggest that future aviation activity, in general, is likely more robust in the multi-engine, jet and helicopter types, as opposed to the single-engine type. Figures below repeat earlier data.

Based upon these data, use of EIK by larger, faster and more expensive aircraft is expected to somewhat increase over the next 20 years, especially relative to use by smaller piston-driven aircraft. Private/business ownership of these larger aircraft is also noteworthy due to the significant decrease in acquisition costs. These

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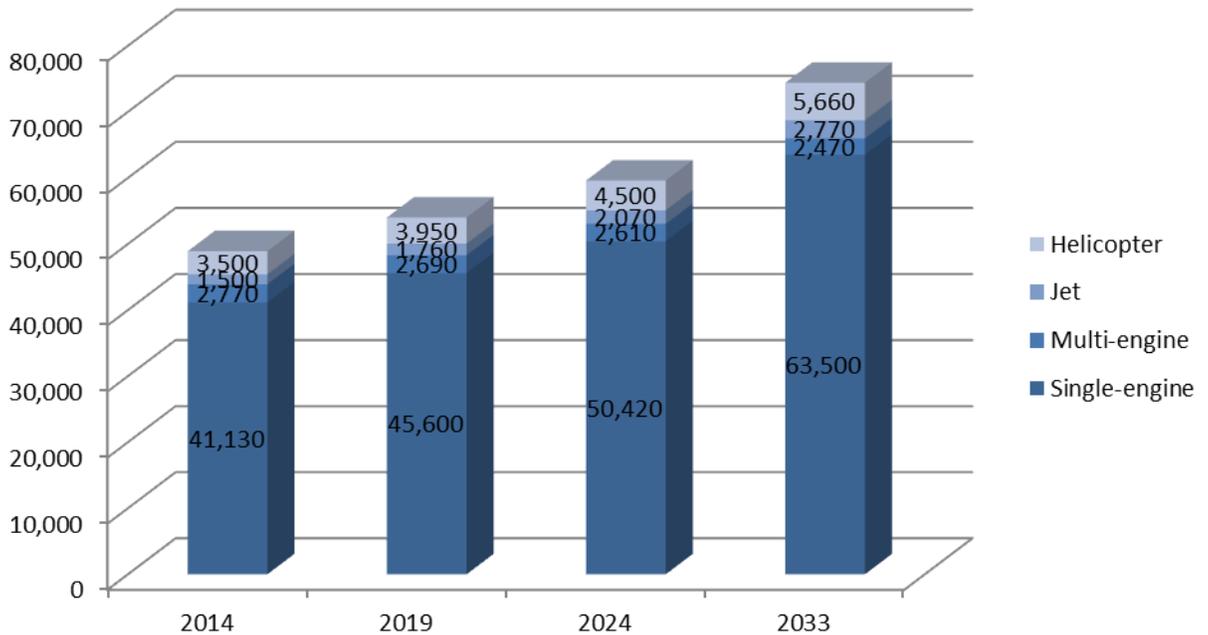
Table 3-8
Forecast of Based Aircraft by Type

(Estimate Source: ADG)

Aircraft Type	2014	2019	2024	2033
Single-engine	41,130	45,600	50,420	63,500
Multi-engine	2,770	2,690	2,610	2,470
Jet	1,500	1,760	2,070	2,770
Helicopter	3,500	3,950	4,500	5,660
Total Aircraft Operations	48,900	54,000	59,600	74,400

Figure 3-12
Forecast of Aircraft Operations by Type

(Visualization: ADG)



factors are considered in the formulation of the aircraft operations forecast by type.

Aircraft Type	CDOT AAGR	FAA AAGR
Single-engine	0.2%	-0.2%
Multi-engine	-0.9%	-0.6%
Turboprop	--	2.8%
Jet	3.1%	3.3%
Rotor	2.6%	2.8%
Sport	3.4%	2.0%

The following annual growth rates are used and are reflected in Table 3-8 and Figure 3-12.

Aircraft Type	Rate
Single-engine	0.2%
Multi-engine	-0.6%

Jet 3.3%
Helicopter 2.6%

Results within the multi-engine, jet and helicopter categories were rounded up to the nearest 10 and single-engine based aircraft were then adjusted to conform to the aircraft operations forecast shown in Figure 3-11, generating an annual growth rate of 2.2 percent for the single engine category. For purposes of the forecast, sport is grouped with single-engine and turboprop is grouped with jet.

3.7.4 Aircraft Mix Forecast

An itinerant operation is defined as any aircraft operation other than a local operation. A local



Table 3-9
Forecast Mix of Aircraft Operations

Year	Local Operations	<i>% Local Operations</i>	Itinerant Operations	<i>% Itinerant Operations</i>	Total Operations
2014	29,340	60	19,560	40	48,900
2019	32,400	60	21,660	40	54,000
2024	35,760	60	23,840	40	59,600
2033	44,640	60	29,760	40	74,400

Table 3-10
Peak Period Operations Forecast

Year	Total Operations	Peak Month Operations	Peak Day Operations	Peak Hour Operations
2014	48,900	4,890	163	24
2019	54,000	5,400	180	27
2024	59,600	5,960	199	30
2033	74,400	7,440	248	37

operation includes operations within the traffic pattern in sight of the field, low approach and or simulated instrument approaches and transitions to a practice area.

EIK’s approximate 60/40 percent local to itinerant mix is dissimilar to the national average local to itinerant mix, averaging 48 percent local and 52 percent. This is primarily because EIK is well utilized for flight training purposes. FAA’s existing 5010 *Airport Master Record* for EIK identifies this operational activity split.

It is considered that flight training will continue and will likely increase as the planning period progresses. Simultaneously, itinerant operations via larger, faster and heavier itinerant aircraft are expected to continue increase, proportionally perhaps. As future basing and operations occurs, future traffic will likely follow these trends and the current proportions are forecast are to remain as-is for the planning period. The forecast mix of operations is presented in Table 3-9.

3.7.5 Peak Period Operations Forecast

Existing and future airport facilities should be designed and constructed not for an average

day’s aircraft activity and not for the busiest day, but for activity somewhere in between.

FAA guidance for estimating peaking activity is reflected in Table 3-10. Peak day is defined as the average number of operations per day during the most active month. In FAA’s Northwest Mountain Region and EIK, the most active month normally accounts for approximately 10 percent of total annual operations and approximately 15 percent of the peak day operations occur during the peak hour.

These operational activity estimates will be useful for analyses in upcoming chapters for estimating the necessary, for example, hangars and apron area to accommodate future activity.

3.7.6 Instrument Operations Forecast

Data collected for this planning indicates that 5 percent of the meteorological observations occurred during IFR conditions. Were EIK aircraft operations contemporaneous with observations, 2012 instrument aircraft operations could be estimated at 2,350 (47,000 at 5 percent).



Table 3-11
Instrument Operations Forecast

	2014	2019	2024	2033
Instrument Operations	2,445	2,700	2,980	3,720

In the absence of historical flight plan counts, this is a reasonable available source of estimated instrument operations data for this planning, per Table 3-11.

3.7.7 Forecast Summary of Aircraft Operations by AAC, ADG, Weight Runway End and Planning Year

The final forecast of this chapter is a forecast of aircraft operations with the following of subject:

1. Planning Years:
 - ✓ 2014, 2019, 2024, 2033
2. Runway Ends:
 - ✓ Runway 15 and 33
3. Airport Approach Category (AAC; A,B,C), Airport Design Group (ADG; I,II) and Aircraft Weight (Small/Large):
 - ✓ A&B-I Small Aircraft
 - ✓ A&B-II Small Aircraft
 - ✓ A&B-II Large Aircraft
 - ✓ C&D-II Large Aircraft

With respect the second grouping, aircraft operations were segregated approximately 70/30 percent based upon observational evidence and the fact that Runway 33 (northerly operation) is the designated 'calm-wind' runway.

With respect to the third grouping, note that:

A&B-I Small forecasts all aircraft types weighing less than 12,500 pounds, with approach speeds up to 121 knots, and wingspans up to 49 feet, inclusive. Example aircraft include:

- ✓ Cessna 152,172, 210, 206, 414
- ✓ Piper Cub, Arrow, Comanche, Saratoga
- ✓ Beechcraft Bonanza, Duke
- ✓ Cirrus, Mooney, Diamond, Glasair
- ✓ Ultralights, Gliders
- ✓ Citation Mustang, Eclipse 500,

- ✓ Embraer Phenom, Beechcraft Premier 1
- ✓ All Helicopters

A&B-II Small forecasts all aircraft types weighing less than 12,500 pounds, with approach speeds up to 121 knots and wingspans up to 79 feet, inclusive. Example aircraft include:

- ✓ Cessna 441 Conquest
- ✓ Pilatus PC-12
- ✓ Beechcraft King Air 90/100

A&B-II Large forecasts all aircraft types weighting greater than 12,500 pounds, with approach speeds up to 121 knots and wingspans up to 79 feet, inclusive. Example aircraft include:

- ✓ Cessna Citation 550, 650, Sovereign
- ✓ Dassault Falcon 20,50,200
- ✓ Hawker 400, 850XP

C&D-II Large forecasts all aircraft types weighting up to 60,000 pounds, with approach speeds up to 166 knots and wingspans up to 79 feet, inclusive. Example aircraft include:

- ✓ Cessna Citation X
- ✓ Bombardier Challenger 300, 605
- ✓ Dassault Falcon 900, 2000
- ✓ Gulfstream 350, 450

Much like the basis for other baseline and forecast data herein, this forecast is subjective and no solid data exists to substantiate; only anecdotal, observational evidence was used as the basis for much of this forecast.

A design/critical aircraft may be derived from Table 3-12. The design/critical aircraft is an aircraft or more frequently a group of aircraft with similar design or performance characteristics with completes 500 annual operations at EIK. 500 annual aircraft operations is FAA's design guideline threshold for planning purposes.



Table 3-12

Forecast Summary of Aircraft Operations by AAC/ADG/Weight, Runway End and Planning Year

	2014	2019	2024	2033
A&B-I Small; Runway 15	14,604	16,092	17,736	22,065
A&B-I Small; Runway 33	34,076	37,548	41,384	51,485
Sub-Total; A&B-I Small	48,680	53,640	59,120	73,550
A&B-II Small; Runway 15	40	60	80	120
A&B-II Small; Runway 33	80	140	170	280
Sub-Total; A&B-II Small	120	200	250	400
A&B-II Large; Runway 15	30	50	60	100
A&B-II Large; Runway 33	70	100	140	250
Sub-Total; A&B-II Large	100	150	200	350
C&D-II Large; Runway 15	0	4	12	30
C&D-II Large; Runway 33	0	6	18	70
Sub-Total; C&D-II Large	0	10	30	100
Totals	48,900	54,000	59,600	74,400

Table 3-13

Critical/Design Aircraft Determination

	2014	2019	2024	2033
Aircraft Approach Category (AAC)	Category A/B	Category A/B	Category A/B	Category A/B
Airplane Design Group (ADG)	Group I	Group I	Group I	Group II
Aircraft Weight (<, >12,500 SWG)	Small	Small	Small	Small
Taxiway Design Group (TDG)	Group I	Group I	Group I	Group II

**TOWN OF ERIE
BOARD OF TRUSTEE AGENDA ITEM**

Board Meeting Date: December 9, 2014

SUBJECT: **STAFF REPORT: Monthly Communications Report – October 2014**

DEPARTMENT: **Administration**

PRESENTER: Fred Diehl, Assistant to the Town Administrator

FISCAL INFORMATION:	Cost as Recommended:	NA
	Balance Available:	NA
	Budget Line Item Number:	NA
	New Appropriation Required:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

**STAFF
RECOMMENDATION:** NA

SUMMARY AND BACKGROUND OF SUBJECT MATTER:

COMMUNICATIONS CALENDAR: Attached is the monthly Communications Calendar for October which provides statistical information on the release and reach of Town of Erie News & Announcements, including the following details:

- 17 Unique Announcements Released via “Notify Me”
- 4,560 “Notify Me” Subscribers

FACEBOOK INSIGHTS:

- 12 Unique posts
- Reach of Facebook posts ranged from 321 (Membership Promotion at ECC) to over 8,200 (Erie Takes First Step Towards King Soopers Shopping Center Development).

WEBSITE: The attached monthly Website Overview Report includes visitor statistics for www.erieco.gov including the following information:

- Total Page Visits by Month/Year: 49,347 / 962,080
- Total Unique Visits by Month/Year: 37,347 / 313,493

ERIE GOVERNMENT TELEVISION STREAMING VIDEO:

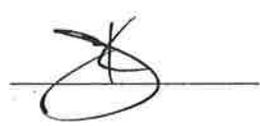
- Total Page Views: 631
- Total Visits: 218

Staff Review:

 _____ **Assistant to the Town Administrator**
_____ **Town Clerk**
_____ **Community Development Director**
_____ **Finance Director**
_____ **Police Chief**
_____ **Public Works Director**

Approved by:

A.J. Krieger
Town Administrator



ATTACHMENTS:

- a. Communications Calendar
- b. Facebook Insights
- c. Website Overview Report

Communication Calendar - October 2014

NEWS & ANNOUNCEMENTS		Notify Me Message	Newsflash Posted on Website	Facebook Post	Twitter Post
Reach via Subscribers & Visitors:		1,198		1,575	885
10/2: Miner's Blast				X	
10/3: Town Invests Over \$61,500 in Historic Downtown Improvements		X	X	X	X
10/10: Online Payment Option for Utility Billing Service Temporarily Unavailable		X	X	X	X
10/13: Historic Downtown Erie Public Art Project Underway		X	X	X	X
10/14: MEMBERSHIP PROMOTION! 15% OFF 3-Month Passes				X	
10/15: Erie Board of Trustees Action Items - October 14, 2014		X	X	X	X
10/21: Town of Erie Receives Excellence in Economic Development Award		X	X	X	X
10/21: Boardwalk Installed along South Coal Creek Trail		X	X	X	X
10/24: ERIE TAKES FIRST STEP TOWARDS KING SOOPERS SHOPPING CENTER DEVELOPMENT		X	X	X	X
10/26: Town of Erie shared Erie Mayor Tina Harris's post (RE: King Soopers Announcement)				X	
10/29: Erie Board of Trustees Action Items - October 28, 2014		X	X	X	X
10/31: Courtesy Notice from Encana		X	X	X	X

ECONOMIC DEVELOPMENT ANNOUNCEMENT		Notify Me Message	Newsflash Posted on Website	Facebook Post	Twitter Post
Reach via Subscribers & Visitors:		735		1,575	885
10/3: Free Business Start-Up Seminar – Thursday, October 23		X	X		
10/7: Business Resources Available 24 Hours a Day Online		X	X		
10/21: Town of Erie Receives Excellence in Economic Development Award		X	X		

PUBLIC WORKS ANNOUNCEMENT		Notify Me Message	Newsflash Posted on Website	Facebook Post	Twitter Post
Reach via Subscribers & Visitors:		604		1,575	885
10/1: Asphalt Repair on Erie Parkway Near Flatiron Meadows Subdivision		X	X		
10/14: Coal Creek Trail Connection and Pedestrian Bridge Construction		X	X		
10/20: Roadway Widening on Erie Parkway East of Bonanza Drive		X	X		
10/23: Erie Parkway Temporarily Reduced to One Lane from 111th Street to 109th Street		X	X		
10/31: Asphalt Repair on Erie Parkway - Between Flatiron Meadows Boulevard & 111th Street		X	X		

POLICE ANNOUNCEMENT		Notify Me Message	Newsflash Posted on Website	Facebook Post	Twitter Post
Reach via Subscribers & Visitors:		929		1,575	885

PARKS & RECREATION ANNOUNCEMENT		Notify Me Message	Newsflash Posted on Website	Facebook Post	Twitter Post
Reach via Subscribers & Visitors:		1,094		1,575	885

TOWN OF ERIE CALENDAR NOTIFICATION		Notify Me Message	Notification Posted on Website	Twitter Post
Reach via Subscribers & Visitors:		485		885
10/3: Open Space and Trails Advisory Board Meeting (10/6)		X	X	X
10/5: Tree Board Meeting (10/8)		X	X	X
10/11: Board of Trustees Regular Meeting (10/14)		X	X	X
10/12: Planning Commission Meeting (10/15)		X	X	X
10/13: Board of Trustees Special Meeting (10/16)		X	X	X
10/15: Board of Trustees/Planning Commission Retreat (10/18)		X	X	X
10/18: Eerie Erie 5k & 10k (10/25)		X	X	X
10/18: Board of Trustees Study Session - CANCELLED (10/21)		X	X	X
10/18: Art In Public Places Adhoc Committee Meeting (10/21)		X	X	X
10/18: Board of Trustees Study Session Followed By Special Meeting (10/21)		X	X	X
10/24: Historic Preservation Advisory Board Meeting (10/27)		X	X	X
10/25: Board of Trustees Regular Meeting (10/28)		X	X	X

<u>ENGAGE ERIE TOPICS</u>		Engage Erie Message	Newsflash Posted on Website	Facebook Post	Twitter Post
Reach via Participants & Visitors:		1,302		1,575	885
<u>YOUTUBE CHANNEL</u>		Views Via YouTube	Newsflash Posted on Website	Facebook Post	Twitter Post
Reach via Subscribers & Visitors:				1,575	885
<u>UTILITY BILL INSERTS</u>		Mailed Bills	Emailed Bills		
Total:		6,800	875		
Trunk or Treat Flyer / Department of Public Works Winter Reminders		X	X		

Updated: 11/19/2014

October 2014 – Facebook Insights

Town of Erie, Colorado – Government Page

Reach: Organic / Paid
Post Clicks
Likes, Comments & Shares

Published	Post	Type	Targeting	Reach	Engagement	Promote
10/31/2014 2:22 am	 EnCana Courtesy Notice, EnCana Oil & Gas has notified the Town that they anticipate beginning			967	156 13	Boost Post
10/29/2014 12:59 pm	 Erie Board of Trustees Action Items – October 28, 2014 In This Issue: First Steps Toward King			829	139 3	Boost Post
10/26/2014 10:40 am	 Town of Erie, Colorado - Government shared Erie Mayor Tina Harris's post.			997	305 48	Boost Post
10/24/2014 10:27 am	 Erie Takes First Step Towards King Soopers Shopping Center Development. Plans for Erie			8.2K	1.1K 475	Boost Post
10/21/2014 12:30 pm	 Boardwalk Installed along South Coal Creek Trail Department of Public Works and Parks			820	153 29	Boost Post
10/21/2014 10:01 am	Yesterday, the Town of Erie received a Silver Excellence in Economic Development Award from			1.1K	89 29	Boost Post
10/15/2014 11:33 am	 Erie Board of Trustees Action Items – October 14, 2014 In This Issue: Board Considers Prohibiting			684	128 13	Boost Post
10/14/2014 10:25 am	 MEMBERSHIP PROMOTION! 15% OFF 3-Month Passes ends tomorrow! Stop by the Erie			321	13 4	Boost Post
10/13/2014 12:45 pm	 Historic Downtown Erie Public Art Project Underway Twelve Colorado artists are now vying			807	57 19	Boost Post
10/10/2014 12:28 pm	 Online Payment Option for Utility Billing Service Temporarily Unavailable The Town of Erie would			614	52 4	Boost Post
10/03/2014 12:07 pm	 Town Invests Over \$61,500 in Historic Downtown Improvements 1 More Reason Things are looking			1.3K	362 46	Boost Post
10/02/2014 11:27 am	 Saturday looks like it is going to be a beautiful day in Erie! Join the Erie Chamber at their annual			560	65 15	Boost Post

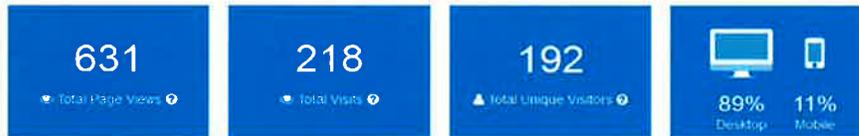
Website Overview Report for www.erieco.gov - October 2014

Total Unique Visits	For the Month: 37,782	Year to Date: 313,493
Total Page Visits	For the Month: 49,347	Year to Date: 962,080

Top 25 Web Pages Visited	# of Visits	Rank
Home Page	22,590	#1
Utility Billing	2,982	#2
Erie Community Center	2,570	#3
Trunk or Treat	1,183	#4
Special Events	793	#5
Parks & Recreation	790	#6
Construction Projects	629	#7
Paying Your Water Bill	568	#8
Recreation Activities	558	#9
Police Department	495	#10
Maps	455	#11
Departments	404	#12
Building Division	402	#13
Classes and Programs	402	#14
Youth Sports	389	#15
Government	381	#16
Board of Trustees	378	#17
Facility Information	369	#18
Online UtilityBill Payment	345	#19
Fees & Membership	322	#20
Residential & Commercial Construction Map	304	#21
Fitness & Wellness	289	#22
Aquatics	289	#23
Building Information & Applications	273	#24
Adult Classes & Programs	271	#25

Erie Government Television Streaming Video via Website - OVERVIEW

OVERVIEW



All Media Live Events Encoder Streams On Demand Media

ALL MEDIA

Filter by title

Media Title	Type	Total Views
Board of Trustees	Encoder	100
Board of Trustees - Oct 28th, 2014	Archive	42
Board of Trustees - Oct 14th, 2014	Archive	37
Board of Trustees - Oct 14th, 2014	Live event	32
Board of Trustees Study Session/Special Meeting - Sep 30th, 2014	Archive	21
Board of Trustees - Oct 28th, 2014	Live event	21
Board of Trustees - Sep 23rd, 2014	Archive	10
Open Space and Trails Advisory Board Meeting - Oct 6th, 2014	Archive	4
Booard of Trustees Special Meeting - Sep 25th,	Archive	2

288

Total Media Stream Views



288 0
External Views Internal Views

TOWN OF ERIE
BOARD OF TRUSTEE AGENDA ITEM
Board Meeting Date: December 9, 2014

SUBJECT: **STAFF REPORT**
Community Development Monthly Reports

DEPARTMENT: Community Development

PRESENTER: R. Martin Ostholthoff, Director

FISCAL	Cost as Recommended:	n/a					
INFORMATION:	Balance Available:	n/a					
	Budget Line Item Number:	000 . 00 . 000 . 000000 . 000000					
	New Appropriation Required:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					

STAFF
RECOMMENDATION: n/a

SUMMARY AND BACKGROUND OF SUBJECT MATTER:

Building Permit Monthly Report

The attached Building Permit Report indicates the number of new residential building permits issued to date (through November 2014) versus the building permit projections utilized in determining the 2014 budget. The Town issued 13 new residential building permits in November.

For 2014 the Town has issued 265 building permits or 88 percent of the yearly projected total of 300 building permits.

The Building Permit Reports for 2013 and 2012 are attached hereto for comparison.

Historic Erie Neighborhood Building Permit Fee Waiver

The effective date of the Historic Erie Neighborhood waiver was October 6, 2012.

A total of 7 permits valued at \$1,846.96 in fees were waived for the month of November 2014. The cumulative value of fees waived since the inception of the program is \$21,847.05. A breakdown of the fees waived is attached hereto.

Staff Review:

___ Town Attorney
___ Town Clerk
 Community Development Director
___ Finance Director
___ Police Chief
___ Public Works Director

Approved by:



A.J. Krieger
Town Administrator

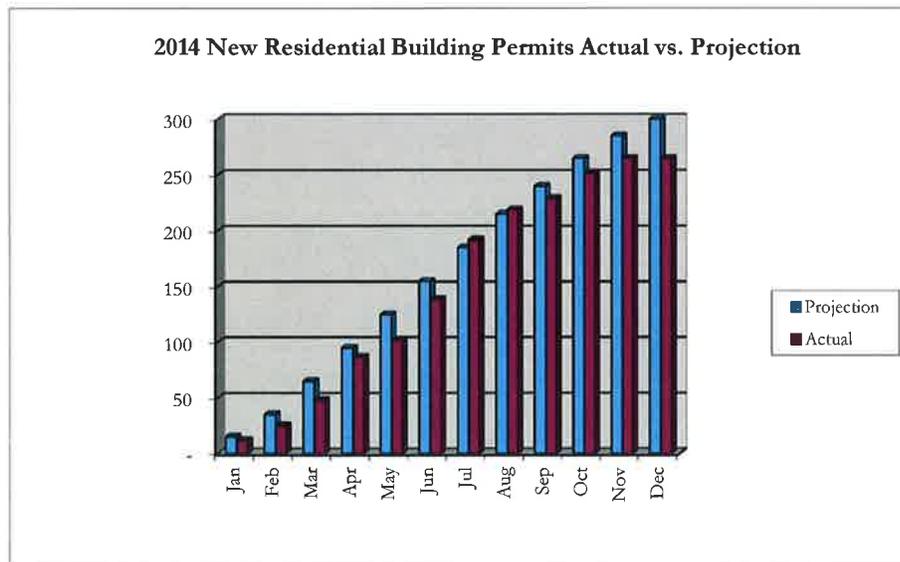
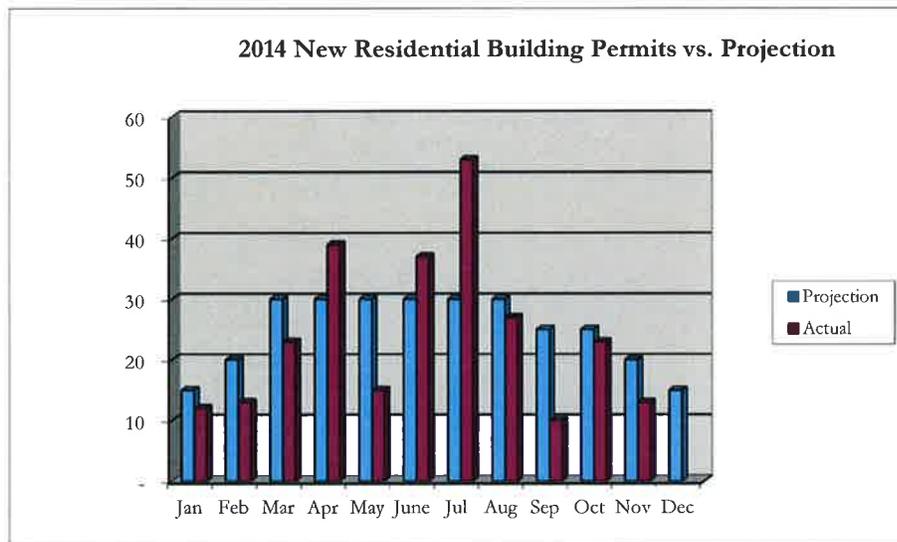
ATTACHMENTS:

- A. 2014/2013/2012 Building Permits to Projection Comparison
- B. Historic Erie Neighborhood Fees Waived

ATTACHMENT A

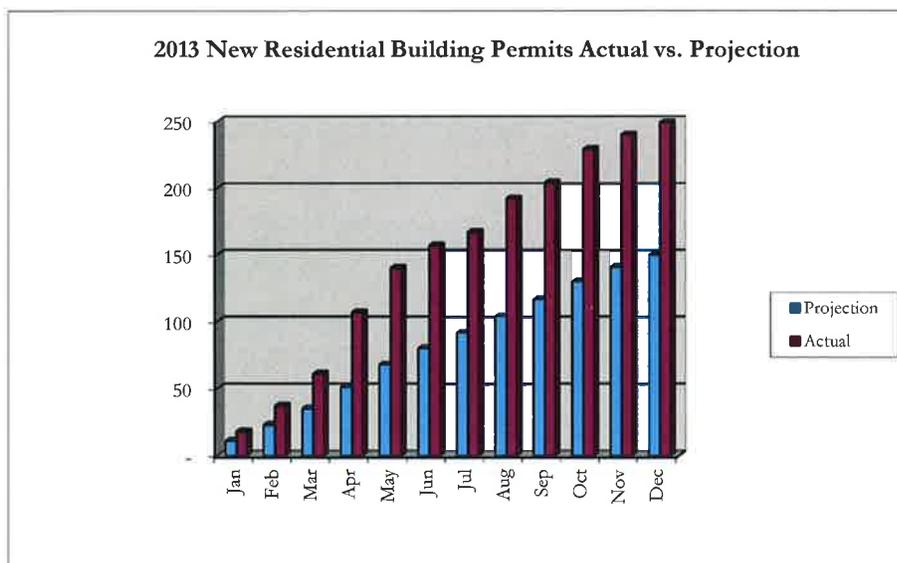
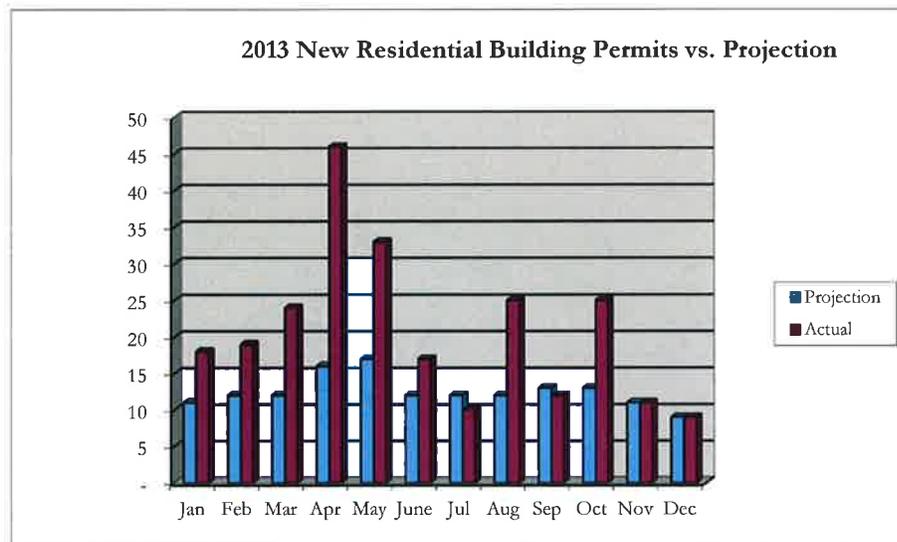
2014 Building Permits to Projection Comparison

2014	Month by Month		Seasonal Projection	Accumulation		
	Projection	Actual		Projection	Actual	
Jan	15	12	8%	Jan	15	12
Feb	20	13	7%	Feb	35	25
Mar	30	23	11%	Mar	65	48
Apr	30	39	12%	Apr	95	87
May	30	15	10%	May	125	102
June	30	37	11%	Jun	155	139
Jul	30	53	10%	Jul	185	192
Aug	30	27	8%	Aug	215	219
Sep	25	10	7%	Sep	240	229
Oct	25	23	6%	Oct	265	252
Nov	20	13	7%	Nov	285	265
Dec	15		5%	Dec	300	265
Total	300					



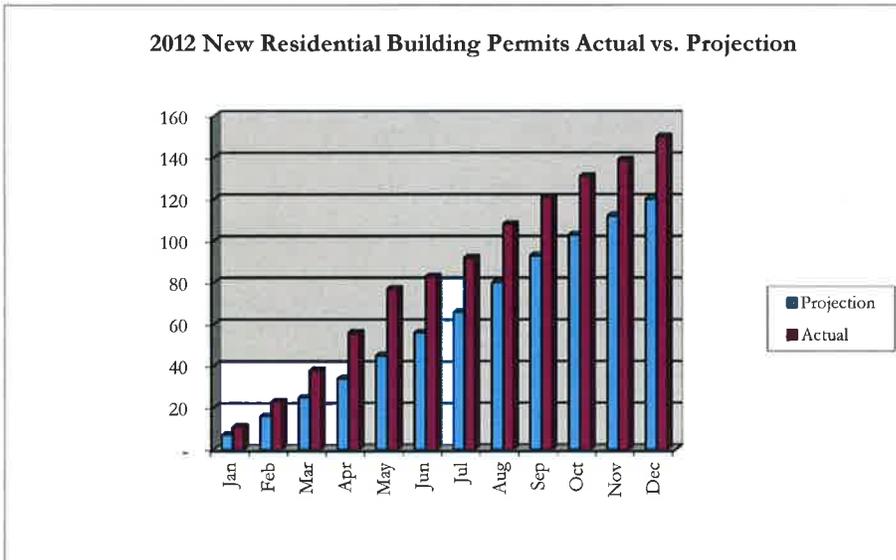
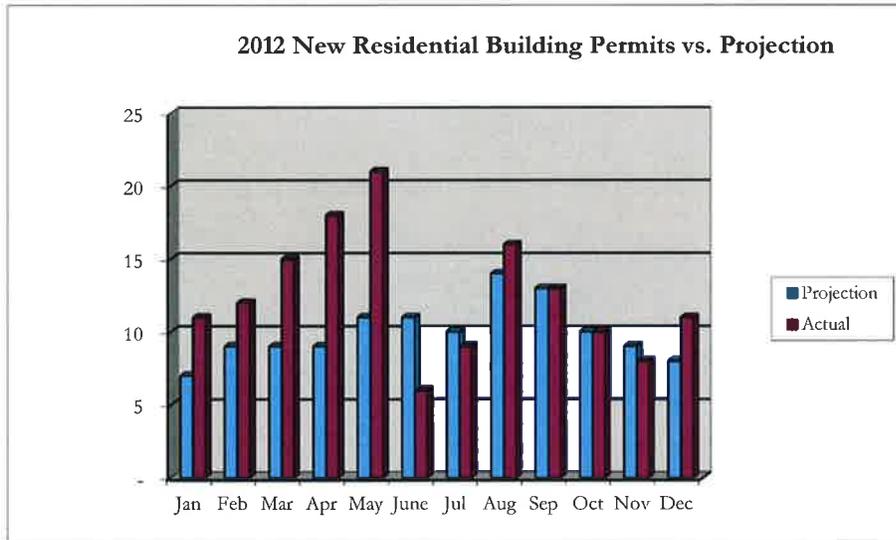
2013 Building Permits to Projection Comparison

2013	Month by Month		Seasonal Projection	Accumulation		
	Projection	Actual		Projection	Actual	
Jan	11	18	8%	Jan	11	18
Feb	12	19	7%	Feb	23	37
Mar	12	24	11%	Mar	35	61
Apr	16	46	12%	Apr	51	107
May	17	33	10%	May	68	140
June	12	17	11%	Jun	80	157
Jul	12	10	10%	Jul	92	167
Aug	12	25	8%	Aug	104	192
Sep	13	12	7%	Sep	117	204
Oct	13	25	6%	Oct	130	229
Nov	11	11	7%	Nov	141	240
Dec	9	9	5%	Dec	150	249
Total	150	150				



2012 Building Permits to Projection Comparison

2012	Month by Month		Seasonal Projection	Accumulation		
	Projection	Actual		Projection	Actual	
Jan	7	11	8%	Jan	7	11
Feb	9	12	7%	Feb	16	23
Mar	9	15	11%	Mar	25	38
Apr	9	18	12%	Apr	34	56
May	11	21	10%	May	45	77
June	11	6	11%	Jun	56	83
Jul	10	9	10%	Jul	66	92
Aug	14	16	8%	Aug	80	108
Sep	13	13	7%	Sep	93	121
Oct	10	10	6%	Oct	103	131
Nov	9	8	7%	Nov	112	139
Dec	8	11	5%	Dec	120	150
Total		120				



ATTACHMENT B

Mechanical Fee	Plumbing Fee	Misc. Fee	Total Fees Waived	Use Tax Collected
			\$ 47.00	\$ 85.86
			\$ 47.00	\$ 66.50
	\$ 50.00	\$ 117.81	\$ 384.06	\$ 175.00
			\$ 54.00	\$ 34.40
		\$ 54.11	\$ 137.36	\$ 38.50
\$ 170.00			\$ 170.00	\$ 175.00
\$ 45.00	\$ 54.00	\$ 352.79	\$ 1,054.54	\$ 700.00
			\$ -	
\$ 215.00	\$ 104.00	\$ 524.71	\$ 1,846.96	\$ 1,189.40

TOWN OF ERIE
BOARD OF TRUSTEE AGENDA ITEM

Board Meeting Date: December 9, 2014

SUBJECT:	STAFF REPORTS
	DRCOG Call for Projects for FY 2016 through FY 2021
DEPARTMENT:	Public Works
	Gary Behlen, Director of Public Works
PRESENTER/PREPARER:	Russell Pennington, Deputy Director of Public Works
	Wendi Palmer, Civil Engineer

FISCAL INFORMATION:	Cost as Recommended:	\$ NA
	Balance Available:	\$ 0
	Budget Line Item Number:	000 . 00 . 000 . 000000 . 000000
	New Appropriation Required:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

STAFF RECOMMENDATION:	N/A
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SUMMARY AND BACKGROUND OF SUBJECT MATTER:

On July 30, 2014, Public Works received an invitation to attend a mandatory training for the Denver Regional Council of Government (DRCOG) Transportation Improvement Program (TIP) Call for Projects to be considered for 2016/2021 funding. The Funding is not a grant, but a reimbursable contract. The Town must incur the expense and submit for reimbursement based on 80% federal funding and 20% local match.

Erie Projects Submitted

The Town was eligible to submit a maximum of eight projects. Public Works Staff submitted the following projects for consideration on September 19, 2014:

- **Coal Creek Trail Extension Project – Total Project Cost \$2,300,000**
The Coal Creek Trail Extension was submitted as two projects due to scoring differences. The trail would be similar to the existing Coal Creek Trail, an 8-ft concrete section with an attached 4-ft crusher fine section. Also include is a pedestrian bridge over Coal Creek to connect into Erie Village.
- **Study Erie Parkway from State Highway 287 to I-25 – Total Project Cost \$200,000**
The study will evaluate the improvements needed and timing for the improvements for Erie Parkway from State Highway 287 to I-25.
- **County Line Road Improvements from Bonnell Ave. to Erie Parkway – Total Project Cost \$4,050,000**
This project includes a signal at County Line Road and Austin Ave, a left turn lane, two through lanes, two bike lanes, detached sidewalks, utility relocations and drainage improvements.
- **County Line Road Improvements from Erie Parkway to Telleen Ave. - Total Project Cost \$3,300,000**
This project includes a left turn lane, two through lanes, two bike lanes, detached sidewalks, utility relocations and drainage improvements.
- **County Line Road Improvements from Telleen Ave. to Evans Ave. – Total Project Cost \$2,750,000**
This project includes a left turn lane, through lanes, two bike lanes, attached sidewalks, utility relocations and drainage improvements.
- **County Line Road Bike Shoulders from Evans to State Highway 52 – Total Project Cost \$2,200,000**
This project includes constructing 4-ft asphalt bike shoulders on each side of County Line Road.

This project would be very similar to the bicycle shoulders that were added to Erie Parkway from Coal Creek to I-25, County Line Road from Erie Parkway to the southerly Town limits and WCR5 Between Vista Ridge and Erie Parkway.

- **Pedestrian Underpass at Taxiway Crossing – Total Project Cost \$400,000**

This project will reconstruct the pedestrian crossing at the airport taxiway crossing of Coal Creek with an improved crossing that will be more pedestrian friendly and be less prone to flooding.

DRCOG TIP Process

The project selection for TIP funding consists of two phases. The first phase is based on the project's scoring, while the second phase is based on other merits of the project. Other merits of the project to be considered might be:

- How does this project benefit the greater region as a whole?
- Does this project address the equity issue by supporting a small community?
- Does the community have matching funds to complete this project?

The Town's projects did not score high enough to be selected during the first phase. On January 7, 2015 the Metro Vision Issues Committee (MVIC), a subcommittee of DRCOG members, will be meeting to make recommendations for the second phase. Each community will have the opportunity to speak for three minutes during the public comment period. This is an opportunity for the Town to pitch the projects for consideration during the phase 2 funding.

Staff Recommendations

Town staff is recommending the following as the top two projects for phase two funding.

- **Coal Creek Trail Extension from Reliance Park to Kenosha Road (Funding starts summer 2016)**
- **Study Erie Parkway from State Highway 287 to I-25 (Funding starts summer 2015)**
- **County Line Road Improvements from Bonnell Ave. to Erie Parkway (Funding starts summer 2016)**

Unless the Board has questions or concerns, Staff will go to the DRCOG – MVIC Committee meeting and present these projects for funding.

Questions or Concerns

If the Board has any questions or concerns regarding pursuing any of these projects, please let staff know.

Board Goal

This serves the Board's goal for Infrastructure – Fund and provide essential infrastructure that corresponds with the planned rate of growth.

Staff Review:

- _____ Town Attorney
- _____ Town Clerk
- _____ Community Development Director
- _____ Finance Director
-  Police Chief
- _____ Public Works Director

Approved by:



A.J. Krieger
Town Administrator

ATTACHMENTS:

- a. None

TOWN OF ERIE
BOARD OF TRUSTEE AGENDA ITEM
Board Meeting Date: December 9, 2014

SUBJECT: STAFF REPORT
Water Treatment and Water Reclamation Report
DEPARTMENT: Public Works
PRESENTER: Gary Behlen, Director of Public Works

FISCAL INFORMATION: Cost as Recommended: \$ 0
Balance Available: \$ 0
Budget Line Item Number: 000 . 00 . 000 . 000000 . 000000
New Appropriation Required: Yes No

STAFF RECOMMENDATION: N/A

SUMMARY AND BACKGROUND OF SUBJECT MATTER:

The Water Treatment and Water Reclamation graphs depict the monthly production averages and the average per capita usage based on the population within the system at the Lynn R. Morgan Water Treatment Facility and North Water Reclamation Facility for 2010-2014.

Water Treatment Facility:

Annual Daily average flow:

•2010 2.529 million gallons •2011~ 2.638 million gallons •2012~ 2.914 million gallons
•2013~ 2.642 million gallons •2014~ 2.911 million gallons (YTD)

July 2013 had the highest flows, 5.896 million gallons, while February 2010 had the lowest flows, 1.025 million gallons.

Annual Daily average gallons per capita usage:

•2010~ 126 gallons per capita •2011~ 131 gallons per capita •2012~ 146 gallons per capita
•2013~ 132 gallons per capita •2014~ 135 gallons per capita (YTD)

July 2013 has the highest usage, 295 gallons per capita, while February 2012 had the lowest usage, 52 gallons per capita.

Water Reclamation Facility:

Annual Daily average flow:

•2010~ 1.007 million gallons •2011~ 1.073 million gallons •2012~ 1.090 million gallons
•2013~ 1.216 million gallons •2014~ 1.389 million gallons (YTD)

September 2013 had the highest average, *1.672 million gallons, while March 2011 had the lowest average, 0.918 million gallons.

Annual Daily average per capita usage:

•2010~ 50 gallons per capita •2011~ 54 gallons per capita •2012~ 54 gallons per capita
•2013~ 61 gallons per capita •2014~ 62 gallons per capita (YTD)

September 2013 had the highest usage, *81 gallons, while February and March 2011 had the lowest usage, 46 gallons.

**Note the increase at the Water Reclamation Facility was due to the storm events in August and September*

Staff Review:

_____ Town Attorney
_____ Town Clerk
_____ Community Development Director
_____ Finance Director
_____ Police Chief
 _____ Public Works Director

Approved by:

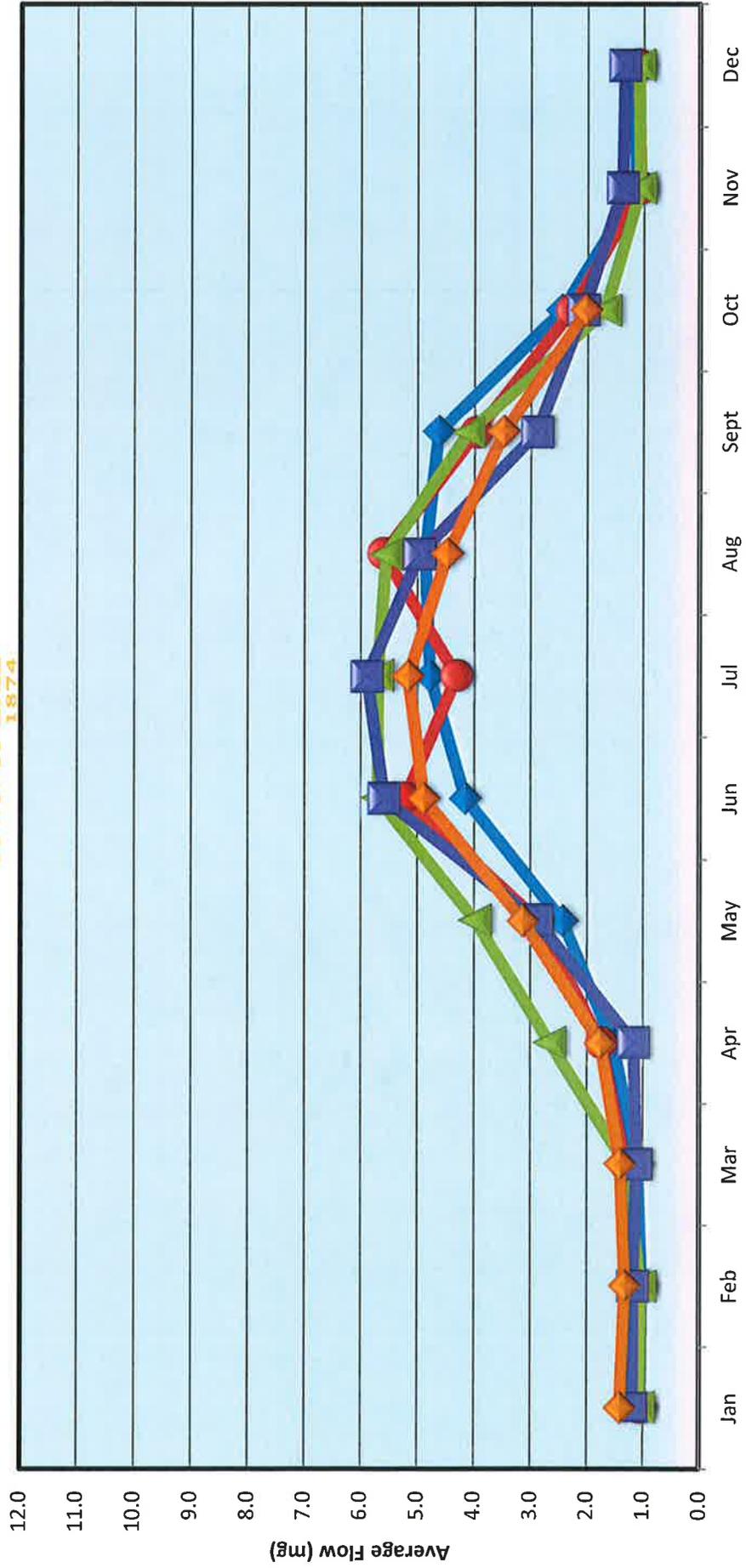


A.J. Krieger
Town Administrator

ATTACHMENTS:

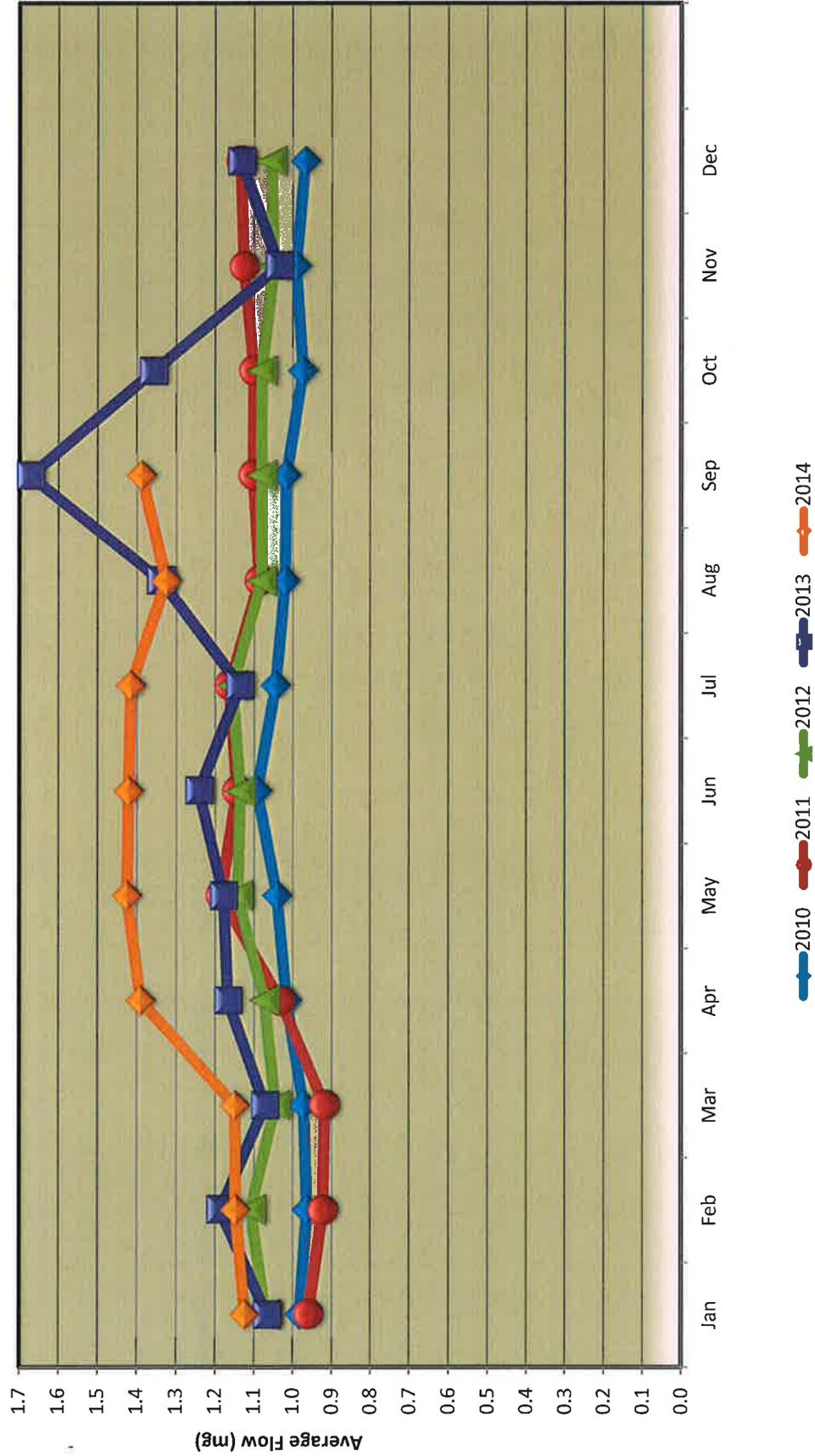
- a. Water Treatment Facility Ave. Production graph
- b. Water Usage per Capita graph
- c. Water Reclamation Facility Ave. Production
- d. Water Reclamation Usage per Capita graph

Water Treatment Facility Average Monthly Production

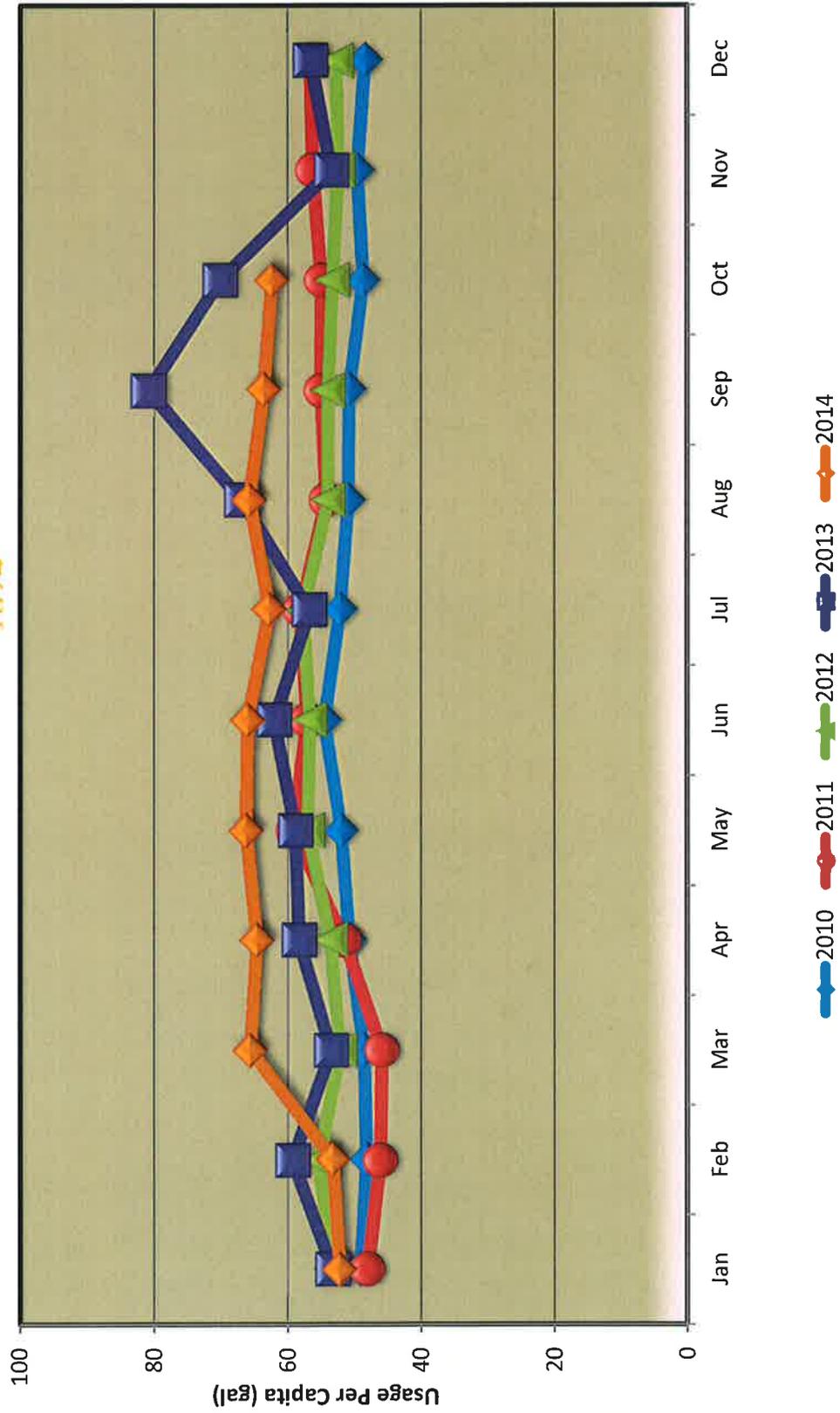


Legend: 2010 (blue diamond), 2011 (red circle), 2012 (green triangle), 2013 (blue square), 2014 (orange diamond)

Water Reclamation Facility Average Monthly Flows



Water Reclamation Facility Ave. Daily Usage Per Capita



TOWN OF ERIE
BOARD OF TRUSTEE AGENDA ITEM

Board Meeting Date: December 9, 2014

SUBJECT: **STAFF REPORTS**
Police Station and Municipal Court Building Construction Update

DEPARTMENT: Public Works
Gary Behlen, Director of Public Works

PRESENTER/PREPARER: **Raelynn Ferrera, Public Works Coordinator**
Joni Fournier, Consilium Partners
Scott McClelland, Consilium Partners

FISCAL INFORMATION: Cost as Recommended: **\$ 0**
Balance Available: **\$ 0**
Budget Line Item Number: 000 . 00 . 000 . 000000 . 000000
New Appropriation Required: Yes No

STAFF RECOMMENDATION: N/A

SUMMARY AND BACKGROUND OF SUBJECT MATTER:

During the April 1, 2014 Town of Erie Regular Municipal Election, voters approved funding for the construction of a new police station and municipal court building to improve the safety of the growing community and to replace the outdated workspace for the police and courts currently located at Town Hall.

Project Progress:

On November 18th, the Project Team presented to the Board the Final Guaranteed Maximum Price for Fransen Pittman to complete the remaining construction of the Police Station and Municipal Court. Extensive work was done by the Project Team to value engineer the Police Station and Municipal Court to bring it to a budget that was in alignment with the funding approved by voters.

Consilium Partners continues to work with OfficeScapes to fine tune the scope and initial budget for the Furniture, Fixtures & Equipment portion of the project. Work will continue as an analysis of the existing furniture is done to see what might be able to be used in the new Police Station and Municipal Court. Interface Communications revised the current audiovisual scope to help meet the approved funding. The design team continues to work with the Town of Erie Building Department through the plan review process to obtain a building permit. Community Development has approved the plans and a full building permit is expected to be issued by the second week of December.

Construction has progressed well over the past month. Site utilities continued and are now mostly complete. Hayward Baker completed the aggregate pier installation. The exterior footings were installed and have been completed around the entire perimeter of the building. The underground plumbing and electrical began at the end of November and will continue into December. Isolated footings are now being formed inside the building footprint for columns.

Construction Progress/ Schedule

Notice of Award & Notice to Proceed (Site Work)	August 27, 2014
Final Guaranteed Maximum Price Awarded	November 18 th
Tilt-Up Panels Begin	December
Estimated Project Completion	July 2015

Project Photos: Photos will be provided and posted to the web throughout the construction of the Police Station and Municipal Court Building, documenting the progress.



Exterior footings blanketed and heated



Radius wall footing prior to stem wall forming



View of Piper Electric installing underground conduit



underground utility work, grading, & exterior footing work.

Board Goal

This serves the Board's goal for Financial Responsibility – Manage Erie's financial operation in an open, responsible and ethical manner.

Staff Review:

- _____ Town Attorney
- _____ Town Clerk
- _____ Community Development Director
- _____ Finance Director
- _____ Police Chief
-  Public Works Director

Approved by:


A.J. Krieger
Town Administrator

ATTACHMENTS:

- a. None



A handwritten signature in blue ink, appearing to read 'D. G. B.', is located in the upper right corner of the page.

ERIE MUNICIPAL AIRPORT - BOARD OF TRUSTEES MONTHLY REPORT

December 2014

PROJECT UPDATES

- **Drainage project** – The drainage project discussed in the previous monthly reports has been completed.
- **Wind Sock and Segmented Circle Project** – Armstrong Consulting has produced the necessary design/build documents for this project. They are in the process of incorporating the Town of Erie's contract documents and preparing to post this project for public solicitation for qualified construction firms.
- **Purchase of airport equipment** – No change in status from October
- **New Engineering Consultant Selection** – No change in status from October
- **CIP Update** – Airport Management and Town Staff with the assistance of Armstrong Consulting is in the process of updating the airport's 5 year Capital Improvement Plan (CIP). Originally there was not much change anticipated from the last CIP submission, however at the beginning of November State of Colorado Division of Aeronautics has informed State of Colorado Airports that due to much lower than expected revenue generation the State has a significant budget short fall. As a result, Erie Airport, as well as most small GA airports in Colorado will not have any State funds available in 2014 to complete planned projects. Airport Management is in the process of evaluating the feasibility of completing 2014 planned projects without the previously available state funds. Most likely next year's planned construction of a Snow Removal and Equipment building will have to be delayed until 2015 to allow for FAA AIP grant funds to be used to complete the project. Airport Management, Town Staff, representatives from Armstrong Consulting, FAA and CDOT are working together to modify the CIP plan to make the best and most effective use of the funds available and will submit to the Board of Trustees a report detailing the modified plan once completed.

SAFETY ISSUES

- Daily/weekly inspections of the airport did not identify any safety issues that required action in the month of November.

NOISE COMPLAINTS

- No noise complaints have been received to date.

EVENTS/ACTIVITIES/TRAINING

- Three rescued dogs were flown in to the Airport this month through the Pilots N Paws organization. Pilots N Paws is a non-profit organization in which generous pilots and other volunteers donate their time, aircraft and fuel to save the lives of innocent animals all over the country. Two Erie based pilots flew from Erie Municipal Airport to Tulsa, OK to rescue two white shepherds for Snow Capped Shepherd Rescue (Bailey, CO) and two pilots flew from Erie Municipal Airport to Ogden, UT to rescue a lab for Summit Dog Rescue (Boulder, CO). These dogs are placed into foster homes by local rescue groups until they are adopted into forever homes. Photos and information on the flights are available on the Vector Air and/or Erie Municipal Airport Facebook pages.

INCIDENTS/ACCIDENTS

- No incident/accidents as of the date of this report.