Former Lowry Air Force Base

FINAL Transition Plan II

November 21, 2006

Prepared by:

Lowry Assumption, LLC
7991 Shaffer Parkway, Suite 300
Littleton, CO 80127

Lowry Assumption, L.L.C.

7991 Shaffer Parkway, Suite 300
Littleton, CO 80127
303.972.6633 Phone
303.948.4155 Fax

November 21, 2006

Ms. Sheila Gaston
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South, B2
Denver, CO 80246-1530

RE: Former Lowry Air Force Base
Consent Agreement Number 01-08-07-02
Submittal of the Final Transition Plan II and Response to Comments

Dear Ms. Gaston:

Enclosed please find two (2) copies of the Final Transition Plan II dated November 21, 2006 for your review. This Plan is submitted in accordance with Paragraph 23(a) of the First Amendment of the Consent Agreement Number 01-08-07-02, effective December 22, 2005.

Please feel free to contact me regarding any questions or comments you may have.

Sincerely,

Joe Aiken
Program Manager

Enclosures

Distribution:

Monica Sheets - CDPHE
Deb Gomez- CCoD
Jim Schrack - City of Aurora
Monty Force- LRA
Patricia Smith - EPA Region 8
Paul Carroll (2) – AFRPA
Rich Long - ESC
Lowry Project File

TABLE OF CONTENTS

I. INTRODUCTION

Under Paragraph 23 (a) pursuant to the First Amendment to the Consent Agreement (Consent Agreement) Lowry Assumption, LLC (LAC) is required to submit, for the Colorado Department of Public Health and Environment's (CDPHE) review and approval, a Transition Plan II (Plan) for the completion of environmental cleanup activities defined by the Consent Agreement among the CDPHE, the Lowry Economic Redevelopment Authority (LERA), and LAC for the Former Lowry Air Force Base (LAFB), effective December 22, 2006.

LAC submitted the Draft Transition Plan II on February 21, 2006. On March 15, 2006, LAC held a public meeting on the draft Transition Plan II. LAC received questions and comments at this meeting from the public. In addition, LAC received additional comments from Christine O'Connor and the City and County of Denver. CDPHE's formal comments were received by LAC on April 13, 2006. This Draft Final Transition Plan II incorporates and/or responds to all of those comments.

The LAFB is located approximately six miles southeast of downtown Denver, and includes approximately 1,866 acres (about three square miles) and is located within the city limits of Denver and Aurora, Colorado (See Figure 1-1). Established in 1937 as a training facility for the Army Air Corps Technical School, LAFB primarily served as a technical training and airfield operations facility. In 1992, LAFB was scheduled for permanent closure under the Base Realignment and Closure (BRAC) Act of 1988, and the Defense Base Realignment and Closure Act of 1990.

On September 20, 1994, LAFB was formally closed. The U.S. Air Force Base Conversion Agency (Air Force) assumed overall responsibility for LAFB, including the remediation of the environmental contamination associated with the historical operations at LAFB in accordance with a variety of State and Federal rules and regulations associated with environmental contamination including, but not limited to, the Colorado Hazardous Waste Act (Sections 25-15-301 to 316, C.R.S.); the Colorado Hazardous Waste Regulations (6 CCR 1007-3); the Defense Environmental Restoration Program (DERP) (Title 10 of United States Code, Sections 2701-2708); the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (CERCLA) (Title 42 of United States Code, Sections 9601 to 9675); the Resource Conservation and Recovery Act (RCRA) (Title 42 of United States Code, Sections 6901 to 6992k); and the National Contingency Plan (NCP) at Title 40 of the Code of Federal Regulations, Part 300. From 1975 to present, the Air Force, through the Installation Restoration Program (IRP) pursuant to CERCLA, has been performing environmental remediation at LAFB.

In an Intergovernmental Agreement dated August 1, 1994, the City and County of Denver and the City of Aurora established the Lowry Economic Redevelopment Authority (LERA). The LERA is an independent quasi-municipal legal entity created pursuant to C.R.S. § 29-1-20, et seq. The primary purpose of the LERA is for developing and coordinating all reuse plans and development strategies, to promote economic redevelopment of the former LAFB.

In August 2002, the LERA and Air Force entered into a series of agreements, which privatized the Environmental Services associated with Operable Unit 2, the Landfill Zone, and Operable

Unit 5 (sitewide groundwater) (collectively known as "Lowry 1"), in order to facilitate the transfer of all properties from the control of the Air Force to control of the LERA. As part of Lowry 1, LAC submitted and received approval from the CDPHE in January 2003 on a Transition Plan which addressed Operable Unit 2 and Operable Unit 5. Updates on the status of the investigations and corrective action requirements of these two areas are provided in Section III of this Plan.

In December 2005, amendments to these agreements were executed which expanded the scope of the Environmental Services primarily to address contamination in soils, issues associated with LAFB (known as "Lowry 2"). For reference, these contracts are as follows:

- A Cooperative Agreement for Environmental Services (hereinafter "Cooperative Agreement") between the United States Air Force Base Conversion Agency and the LERA, dated August 13, 2002, amended December 1, 2005;
- A Remediation Agreement between LERA and LAC, dated August 13, 2002, amended September 20, 2005;
- A Consent Agreement, No.01-08-07-02, among the CDPHE, the LERA, and LAC, dated August 13, 2002, amended September 20, 2005 with an effective date of December 22, 2005.

These documents are collectively known as the Privatization Documents. The Consent Agreement identified a number of areas in Paragraph 18 through 18i that will require corrective action responses from LAC (See Figure 1-1). Those additional environmental issues are as follows:

1. Operable Unit 2 (OU2) - LAC will continue the Air Force's program of groundwater monitoring of OU2 to determine if radionuclides potentially buried there are leaching into the groundwater and surface water (Paragraph 18).
2. Building 606 (Paragraph 18b).
3. Outdoor Firing Range (OFR) (Paragraph 18c).
4. Fire Training Zone (FTZ) (Paragraph 18d).
5. Building 898 (Paragraph 18e).
6. Abandonment of two (2) deep wells (Paragraph 18f).
7. RCRA Facility Assessment (RFA) (Paragraph 18g). The Draft Final RFA was submitted to the CDPHE in January 2005. All Known and Unknown Conditions, as those terms are defined in the Cooperative Agreement, identified through the RFA will be addressed as part of First Amendment to the Consent Agreement. Although additional concerns may be identified, the following is a list of Known Conditions that warrant further investigation and potential remedial activities:
    a. Building 416 (1016)
    b. Building 546
    c. Building 568

d. Building 753

e. Building 1496A

f. Building 1499

g. The Air Force designated area PAA-2

h. Building 777

i. Potential Polyvinyl Chlorinated Biphenyl (PCB) contamination at fifteen (15) existing facilities reportedly stored or used PCB-containing transformers during LAFB's operational history. These facilities include Buildings 349, 353A, 354, 359, 361, 383, 401, 811, 850, 901, 903, 905, 959, 999, and 1499. The buildings with 300 and 400 series numbers are located south of East 6th Avenue and west of Uinta Way. The buildings with 800 and 900 series numbers are located in the northeastern portion of LAFB and are part of the Colorado Community College System (CCCS).

j. Additional Groundwater Investigation and/or Remediation.

k. Asbestos Contaminated Soils within the Northwest Neighborhood (NWN) (Paragraph 18h).

In addition, under Paragraph 18i of the Consent Agreement, LAC will also address any and all other contaminated media and/or debris identified on LAFB (See Exhibit D to the First Amendment to the Consent Agreement) during Lowry 2 including, but not limited to, groundwater contamination and asbestos in soil, as such issues are discovered by LAC, the LERA, or any other entity(ies). The only excluded matters are those that are Air Force Obligations as defined in the Cooperative Agreement as amended.

This Plan is organized into eight (8) sections as follows:

1. Section I – Introduction, site description and location, and a summary of LAFB's environmental administrative record for all environmental issues associated with paragraphs 18 through 18i of the Consent Agreement (as described further below);

2. Section II - a summary of the known nature and extent of each instance of contaminated media and/or debris, current status of investigations and/or remedial activities, including any related exposure pathways;

3. Section III - this section combines Paragraphs 23iii and iv, and provides a detailed description, which includes LERA's proposed reuse priorities, and a map that clearly identifies the individual parcels on Lowry (identified in lines a – f below) These Finding of Suitability for Early Transfer (FOSET) parcels are identified below and shown in Figure 1-1 to this document:

   a. Parcel No. 1 is located in the Northwest Neighborhood, west of Uinta Way, east of Spruce Court and Ulster Way, and south of East 11th Avenue.
   b. Parcel No.2 is the Landfill Zone (Operable Unit 2) located north of Alameda Avenue on the southern portion of LAFB.

c. Parcel No. 3 is Town Center property impacted by the Headquarters Groundwater Plume, east of Quebec Street, north of East 1st Avenue, and south of East 5th Avenue.
d. Parcel No. 4 is made up of two areas, 4(A) and 4(B). FOSET 4(A) is impacted by the Main Trichloroethylene (TCE) groundwater plume and is made up of the southern portion of the Kelly Road Dam overall area, and FOSET 4(B) is property also impacted by the Main TCE plume that begins near the OFR, west of the intersection of Dayton Street and East 1st Avenue and flows north/northwest. It also includes the OFR soil lead-impacted soil.
e. Parcel No. 5 includes the soil contamination at the FTZ, as well as the contaminated groundwater at FTZ TCE1, TCE2, TCE3, and the BTEX and PCE Havana Street offsite plumes. All of these are located southwest of East 1st Avenue and Havana Street.
f. Parcel No. 6 is the location of the former Building 606, also known as the Tapestry site, located north of 6th Place, west of Uinta Way, south of East 8th Avenue, and east of Ulster Way.
g. Parcel No. 7 is Building 898 located in the northeastern corner of LAFB north of East 7th Avenue on Beeler Street.

4. Section IV - This Section combines the requirements of Paragraphs 23v and vi of the Consent Agreement. It presents the planned investigations and corrective actions associated with the items identified in Section II of this Plan. In addition, it provides a process for any potential treatability studies/pilot tests that may be proposed to assist in the evaluation of potential remedies on LAFB. Also, a proposed schedule is provided for:
   a. Submittal of Remediation Work Plans associated with those areas where investigation was completed by the Air Force, and LAC may proceed to removal/remedial actions;
   b. Submittal of Work Plans associated with interim actions/investigations of areas already underway by LAC;
   c. A process for submittal of characterization work plans associated with any and all proposed investigations; interim remedial actions (IRAs), or corrective action plans (CAPs) associated with any remedy evaluation;
   d. Submittal of any other related work products, deliverables, etc., including but not limited to a draft Site Health and Safety Program; and
   e. A proposed schedule for investigation and remedial actions associated with Paragraphs 18 through 18i of the Consent Agreement.

5. Section V - identification of all applicable State and Federal standards associated with remediation of any contaminated media and/or debris at LAFB;

6. Section VI - Identification of interim institutional controls placed or to be placed on FOSET parcels associated with paragraphs 18 through 18i of the Consent Agreement;

7. Section VII - Soils Management Program, which shall include, but not be limited to:
   a. identification of the roles and responsibilities of the parties;

b. identification of potential contaminants of concerns associated with the historical activities at LAFB;
c. procedures for construction oversight and reporting of suspect media and/or debris;
d. general materials management protocols, including soil sampling and characterization, methodology and frequency, excavation and removal requirements, and disposal procedures for soil that contains hazardous or solid waste;
e. general protocols for handling particular contaminants of concern, previously unknown contaminated media and/or debris, including asbestos in soil;
f. annual training sessions;
g. general protocols for determining further investigation and/or remediation; and
h. requirements that need to be fulfilled in order to achieve closure.

8. Section VIII - Initial closure cost estimate, which will be periodically updated in accordance with paragraph 61 of the Consent Agreement.

PURPOSE OF REPORT

Lowry 2 expands the definition of LAFB to its historical boundaries as set forth in Figure 1-1, and increases the scope of work to be performed to include all contaminated media and/or debris more specifically articulated above. In addition, the five original FOSET parcels defined in Lowry 1 have been expanded to a total of seven (7) FOSET parcels, as identified in paragraph 23a, all of which are included in the FOSET accomplished under Lowry 2.

This Plan is to be used as:

1) a project planning tool for future activities associated with Lowry 2;

2) an opportunity to summarize the extensive database and develop a common understanding of remaining soil data gaps;

3) as a communication tool to assure that CDPHE, the U.S. Environmental Protection Agency (EPA), and the stakeholders understand the approach and timing of LAC planned activities;

4) a tool to generate discussion so that LAC understands the needs and requirements of CDPHE, EPA, and the stakeholders; and

5) to provide a framework to achieve the goals of the Consent Agreement including "seeking ways to accelerate corrective actions and eliminate unnecessary tasks and reviews by facilitating a close working relationship between all parties."

This Plan relies upon a variety of information sources, including work previously performed by the Air Force and LAC. The most recent and comprehensive summary of all investigations and current environmental issues is presented in the Draft Final RFA that was submitted by the Air Force in January 2005 for approval by the CDPHE. The RFA was submitted in response to a

Compliance Order, and amendments thereto. Within the Compliance Order, CDPHE directed the Air Force to review and refine the current understanding of environmental conditions at the former LAFB, and to specifically address a list of potential environmental concerns related to historical operations and activities that occurred at the former base. Information regarding environmental conditions of the property at the former LAFB has been developed primarily under the Air Force Installation Restoration Program (IRP), which is conducted pursuant to the CERCLA and DERP. The IRP was designed to investigate and, as necessary, respond to releases or threats of releases of hazardous substances to the environment. The IRP at LAFB began in 1983 to implement the requirements of CERCLA and the National Contingency Plan (implementing regulations for CERCLA), and has identified areas of base property requiring investigation and implemented response actions where releases were identified that posed a potential risk to human health and the environment. The Draft Final RFA Report summarizes the environmental studies conducted at LAFB and conclusions therefrom, and supplements the earlier efforts with additional information and data gathered in carrying out the RFA Work Plan. It captures information from a variety of information-gathering efforts, such as interviews, archive searches, review of base records, aerial photograph reviews, reviews of as-built drawings, and visual inspections of former base property.

This Plan is not intended to provide detailed information on any subject, but is intended to summarize previous investigations, provide a summary of data gaps remaining to be filled, if applicable, present a proposed list of upcoming planned activities, and present a schedule (with enforceable milestones where possible) for planned activities. Each of the summaries for planned activities will be expanded and detailed in a series of Work Plans that will be prepared and submitted to CDPHE in accordance with the Consent Agreement. Where appropriate, information is included to help the reader understand the recommendations that are made herein.

SITE DESCRIPTION AND LOCATION

The LAFB is located approximately six miles southeast of downtown Denver. The LAFB includes approximately 1,866 acres (about three square miles) and is located within the city limits of Denver and Aurora, Colorado. The base is bounded by 11th Avenue on the north, Dayton and Havana Streets on the east, Alameda Avenue on the south, and Monaco Parkway and Quebec Street on the west.

Topography

LAFB is located along the western edge of the Great Plains physiographic province, which terminates west of the base at the Front Range of the Rocky Mountains. The LAFB is located in an area of grass-covered tablelands generally developed on loess and alluvium. The topography in the LAFB vicinity consists of gently rolling hills separated by broad valleys. Relief across the base is approximately 100 feet. The highest point on base, 5,450 feet above mean sea level (AMSL), is located at the southeast corner of the base. The lowest point on base, 5,350 feet AMSL, is located along the north central perimeter of the base in the wetlands area formed by the Kelly Road Dam.

Geology

The geology of LAFB and the immediate vicinity is characterized by unconsolidated sediments of varying thickness overlying bedrock. The unconsolidated sediments consist of Quaternary alluvium and windblown deposits. Alluvium is a general term for clay, silt, sand, and gravel deposited by streams or other bodies of running water. The alluvium at LAFB is the Piney Creek and post-Piney Creek Alluvium of Holocene age. Bedrock at LAFB is comprised of claystone, siltstone, and sandstone of the upper Cretaceous and Paleocene Denver Formation. The bedrock surface is an erosional surface shaped by stream processes. The windblown deposits and alluvium are collectively referred to here as alluvium. The alluvium at LAFB and in the surrounding area is generally thicker within paleochannels developed on the bedrock surface. Paleochannels are remnant stream channels carved into the bedrock during the geologic past. The alluvium in paleochannels generally contains a larger proportion of sand, due to its accumulation as stream deposits.

The alluvium at LAFB consists of fluvial deposits of silty, sandy clay containing lenses of silt, silty sand, sand, and gravelly sand. The thickness of the alluvium at LAFB ranges from a few feet to greater than 115 feet and is, for the most part, controlled by the relief on the Denver Formation erosional surface. The alluvium is thinnest along the eastern margin of LAFB where it ranges from 2 to 10 feet in thickness over a bedrock high. The alluvium thickens toward the western base boundary where thicknesses in excess of 115 feet have been observed. The western boundary of LAFB roughly coincides with the eastern edge of a buried paleochannel formed by an abandoned course of Cherry Creek. This paleochannel contains as much as 85 feet of clean pebbly sand beneath 5 to 20 feet of fine-grained loess and windblown sand.

Other smaller paleochannels are present at LAFB. One paleochannel crosses the southern boundary, trending northwest along the eastern edge of the landfill (parallel to Uinta Way) and turns west in the vicinity of 6th Avenue to join the Cherry Creek paleochannel. The maximum thickness of alluvium observed in this paleochannel is 69 feet. Another follows the former Westerly Creek drainage from the southeast corner of the LAFB northwestward to a point west of the former commissary where it turns north-northeast to Kelly Road Dam on 11th Avenue. The maximum thickness of alluvium observed in this paleochannel is 25 feet.

The bedrock formation at LAFB is the Cretaceous and Paleocene Denver Formation. The Denver Formation in this area consists primarily of claystone and siltstone with occasional thin, discontinuous, silty sandstone units. The top of the Denver Formation is typically weathered or fractured. The density of fracturing in the weathered zone typically decreases with depth. The weathered Denver Formation at LAFB is generally varying shades of yellow-brown to brown with local red to reddish brown as fracture linings or fracture fill. The top of the unweathered zone is typically picked where the Denver Formation assumes a characteristic “blue” color, locally called the “Denver Blue”. The Denver Blue is not a stratigraphic boundary. Rather, it represents the maximum depth below the Denver Formation erosional surface where predominantly oxidizing conditions have existed. Below that depth, the formation assumes the blue color where predominantly reducing conditions have persisted over the geologic past. At LAFB, the Denver Blue generally occurs approximately 20 to 30 feet below the Denver Formation erosional surface.

Meteorology

The climate of LAFB can generally be classified as that of a semi-arid continental highland. Characteristics of the local climate are low humidity, abundant sunshine, relatively low precipitation, moderate to high winds, and a wide differential in daily temperatures. The estimated average annual precipitation at LAFB is approximately 14.7 inches, based on records from the former Stapleton Airport, located approximately one mile north of LAFB. Approximately 60 percent of the annual precipitation falls in the five-month period from April to August. The average annual snowfall is 60.3 inches, based on a 33-year period of record. The average annual temperature is 50.3 degrees Fahrenheit (^{o}F), with an average low temperature of 30.1^{o} F in January and an average high temperature of 72.8^{o} F in July. In general, annual evaporation rates exceed precipitation rates.

Surface Water

Most of LAFB is located within the Westerly Creek drainage basin. The Westerly Creek drainage basin is a relatively small drainage basin that drains to Westerly Creek. Westerly Creek is a storm drainage watercourse tributary that merges with Sand Creek approximately three miles north of LAFB. Sand Creek is a tributary to the Platte River. Westerly Creek enters the LAFB site near the southeast corner of the base near Havana Street and Alameda Avenue, and flows in a general northwesterly direction within the base boundary. Westerly Creek exits the base at the Kelly Road Dam, located at the northern base boundary adjacent to 11th Avenue.

Freshwater wetlands occupy portions of the basins formed by Kelly Road and Westerly Creek Dams as well as several smaller areas on the LAFB. Most of the wetland areas on the LAFB were created by previous construction activity, including the construction of the Kelly Road and Westerly Creek Dams.

Groundwater Hydrology

The groundwater impacted by past activities at LAFB occurs in the alluvium and in sandstone and fractured siltstone and claystone of the Denver Formation. In general, the water table surface at LAFB slopes to the northwest, following surface and bedrock topography. The water table gradient varies spatially and ranges from 0.006 to 0.07. Localized flat gradients occur where groundwater flows through thick deposits of sandy alluvium within paleochannels on the bedrock surface. Steeper gradients occur where the alluvium is unsaturated and groundwater occurs only in bedrock. Depth to the water table increases from east to west and ranges from 2 to 65 feet below ground surface (ft bgs).

In two general areas on LAFB, the alluvium is unsaturated and the water table occurs within the Denver Formation. These areas correspond to highs on the Denver Formation erosional surface. The largest area extends northwest from the southeastern corner of the LAFB. The smaller area of unsaturated alluvium extends north from the southwestern boundary of the base.

Periodic basewide water table measurements indicate annual water level fluctuations generally range from less than 1 foot to 4 feet. The greatest amount of fluctuation, up to 10 feet annually,

was observed in the FTZ area at the eastern edge of the LAFB in January 1996. However, this large amount of fluctuation in the FTZ area was related to periodic flushing of hydrants near the Mira Vista Golf Course clubhouse.

Demography and Land Use

Land use categories on LAFB include industrial, institutional (medical and educational), commercial, residential, public facilities/recreational, and agricultural. Large areas of vacant land are also present at the site. Reuse plans for LAFB focus on the development of residential neighborhoods, an educational campus, an employment campus, and recreation areas.

Development surrounding LAFB consists of residential housing and retail businesses. Commercial properties are located along Colfax Avenue to the north, Colorado Boulevard to the west, Leetsdale Drive to the southwest, Alameda Boulevard along the southern boundary, and Dayton and Havana Streets along the eastern boundary. Commercial properties include service stations, dry cleaners, auto dealerships and body shops, and other retail businesses. Significant land use changes on LAFB will result as development proceeds and the base is integrated into the cities of Denver and Aurora (See Figure 1-2).

DESCRIPTION OF THE ADMINISTRATIVE RECORD

The Administrative Record for LAFB contains a comprehensive library of historical documents, including correspondence, technical plans and reports, agreements and other legal documents. On-going Air Force and LAC remedial investigations or cleanup activities will generate additional documents over time that will be added to the record.

The Air Force maintains an internet web site for access to numerous facility administrative records. The contractor maintained Administrative Record for LAFB may be accessed at https://afrpaar.afrpa.pentagon.af.mil/ar/docsearch.aspx. This site includes a tutorial for finding information on the searchable database. Because the record site is updated approximately every six months, the web site may not contain all the latest additions.

A complete up-to-date set of the draft and final environmental reports are also contained in the LERA Library located on-site. A regularly updated index is available that lists documents added by date. In addition, selected information regarding environmental issues is available on the LERA web site at www.lowry.org.

Key reports applicable to the items identified in Parargraphs 18 through 18i, and any facilities located on those parcels are listed in Appendix A of this Plan. Additional information about or from the Administrative Record, or access to this information, is available from:

Mr. Paul Carroll
Base Environmental Coordinator
AFBCA/DC- Lowry
9801 Reese Blvd. North, Suite 300
Lubbock, TX 79416
Phone: (806) 885-5010
Fax: (806) 885-5022

OR

Ms. Elizabeth Sopher
Lowry Assumption, LLC
765 Uinta Way
Denver, CO 80230
Phone: (303) 972-6633
Fax: (303) 948-4155

Environmental Conditions
and Ongoing Remediation

LEGEND

- GROUNDWATER PLUME ISSUE
- SOILS ISSUE
- PCB INVESTIGATIONS
- SOILS DATA GAP INVESTIGATIONS

E. 11th AVENUE
SYRACUSE ST.
SPRUCE COURT
Lowry Filing No. 28
FOSET PARCEL 1
670 north
568
546
NWN asbestos compliance area
E. 8th AVENUE
667
ULSTER WAY
FOSET PARCEL 4(a)
Main TCE Plume
777
YOSEMITE STREET
E. 11th AVENUE
FOSET PARCEL 7
898
850
753
811
901
905
903
959
999
DAYTON STREET
E. 7th AVENUE
E. 6th PLACE
FOSET PARCEL 6
E. 6th AVENUE
QUEBEC STREET
E. LOWRY BOULEVARD
E. 6th AVENUE
E. 5th AVENUE
UINTA WAY
361
353A
359
349
354
401
402
Headquarters TCE Plume
FOSET PARCEL 3
383
Main TCE Plume
PAA_2
1496A
1499
FOSET PARCEL 4(b)
411
Outdoor Firing Range
DAYTON STREET
E. LOWRY BOULEVARD
E. 1st AVENUE
416
E. 1st AVENUE
TCE 1
FOSET PARCEL 5(a)
Fire Training Zone
TCE 2
FOSET PARCEL 5(c)
FOSET PARCEL 5(b)
TCE
FOSET PARCEL 5(d)
BTEX, 1,2 DCA
HAVANA STREET
E. ALAMEDA AVENUE
FOSET PARCEL 2
LANDFILL (OU2)
E. ALAMEDA AVENUE

1000 0 1000 2000
SCALE 1"=1000'

LOWRY ASSUMPTIONS, LLC

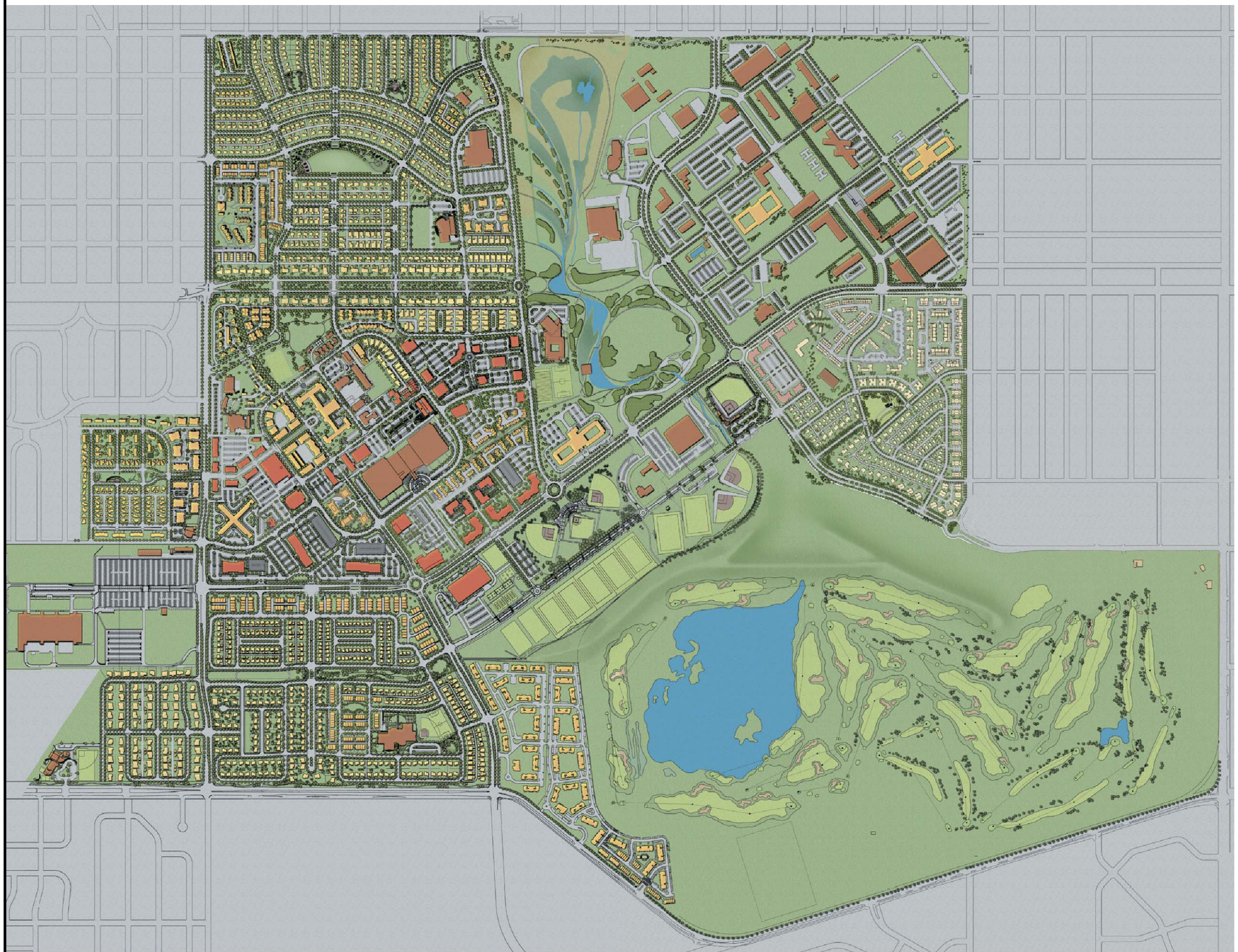
FIGURE 1-1

TRANSITION PLAN II
ENVIRONMENTAL

URS 8158 E. 5th Ave. Denver, CO 80230 Tel: 303-592-2831

DESIGNED BY:		SCALE	DATE ISSUED: MAY 2006	EX1
DRAWN BY:	JKB ADJ	HORIZ: 1"=1000'		
CHECKED BY:		VERT. n/a	SHEET NO. 1 OF 1 SHEETS	

K:\Projects\IRG-LA-misc\tp-env2.dwg 5/25/2006 1:34:39 PM MST



K:\Projects\IRG-LA-misc\tp-LIM.dwg 5/25/2006 1:29:24 PM MST

URS 8158 E. 5th Ave. Denver, CO 80230 Tel: 303-592-2831

LOWRY ASSUMPTIONS, LLC

FIGURE 1-2

TRANSITION PLAN II
MASTERPLAN

DESIGNED BY:		SCALE		DATE ISSUED: MAY 2006	EX1
DRAWN BY:	JKB	HORIZ:	N.T.S		
CHECKED BY:	ADJ	VERT.	n/a	SHEET NO. 1 OF 1 SHEETS	

II. NATURE AND EXTENT OF ENVIRONMENTAL IMPACTS

This Section describes the nature and extent of environmental impacts of each known instance of contaminated media and/or debris that is within the scope of Lowry 2. In preparing this discussion of the nature and extent of contamination, all applicable resources were consulted including the RFA prepared by the Air Force and the recent Supplemental Environmental Baseline Study (SEBS) prepared in conjunction with the FOSET, dated December 22, 2005.

The First Amendment to the Consent Agreement, in Paragraphs 18 through 18i, briefly summarized the known instances of contaminated media and/or debris, current status of investigations and/or remedial activities. This Section generally follows the same format of the Consent Agreement. In addition, this Section also incorporates the current corrective action measures being executed by LAC with respect to OU5, sitewide groundwater and OU2, the Landfill Zone.

A. OPERABLE UNIT 5 – BASEWIDE GROUNDWATER

For an update on the nature and extent of environmental impacts on groundwater, please review the FOSET, dated December 22, 2005. LAC will continue its corrective actions in accordance with the Consent Agreement.

B. OPERABLE UNIT 2 – LANDFILL ZONE

A complete summary of the environmental condition of OU2 was presented in the FOSET, dated December 22, 2005. In December 2005, additional results of a program to characterize radionuclides in the landfill zone were submitted by the Air Force in a *Summary of the Long-Term Monitoring for Radiological Parameters, Operable Unit 2, Former Lowry Air Force Base, Colorado, Cabrera Services,* 2005.

The purpose of the long-term monitoring (LTM) program, performed by Cabrera Services (Cabrera) on behalf of the Air Force, was to determine whether radionuclides of potential concern (ROPCs) could be present within OU2, and whether these ROPCs could be leaching into groundwater or surface water. This program was specially designed to track ROPCs in groundwater, surface water, and sediment over a longer, continuous period of time than had previously occurred at OU2 (Figure 2-1).

Cabrera collected groundwater samples from existing designated monitoring wells located around the perimeter of OU2 over the course of four quarterly sampling episodes beginning in March 2004, with subsequent quarterly events in June 2004, October 2004, and February 2005. Sampling procedures included low-flow sampling to obtain samples representative of the groundwater quality and minimizing disturbance of natural groundwater flow conditions in the aquifer. Both filtered and unfiltered samples were collected during the first quarter (1Q) while only filtered samples were collected for the second, third, and fourth quarters (2Q, 3Q, 4Q). It was demonstrated that filtered and unfiltered samples from 1Q were statistically indistinguishable from each other due to the low-flow sampling method.

Surface water and sediment samples were collected from Westerly Creek upstream, downstream, and in locations adjacent to OU2. The locations of several surface water and sediment samples were revised during the LTM to provide a more comprehensive characterization of Westerly Creek and the surrounding wetlands. This relocation was agreed upon by the City and County of Denver, CDPHE, USEPA, other stakeholders and the Air Force. Analytical data collected during the course of the OU2 LTM program were reduced using guidance from the USEPA's Interim Guidance on Statistical Analysis of Groundwater Monitoring Data at Resource Conservation and Recovery Act (RCRA) Facilities (USEPA, 1989) as well as the Addendum to the Interim Final Guidance (USEPA, 1992). This guidance outlines analysis techniques and protocols for evaluating contaminant levels in test wells versus background wells and/or fixed maximum contaminant levels (MCLs).

Cabrera's interpretation of the data from the four quarterly sampling events episodes yielded the following conclusions regarding ROPC behavior at OU2:

1. Dissolved uranium levels greater than the 30 µg/L MCL were consistently found in both upgradient and downgradient groundwater wells at OU2. The isotopes of uranium (U-234, U-235, and U-238) were also consistently measured above the MCL equivalent activity level for each isotope.
2. The only ROPC found to be above regulatory standards was uranium. All other measured ROPCs, including Gross Alpha and Gross Beta, were shown to be at levels below regulatory limits.
3. Elevated Gross Alpha and Gross Beta measurements that were obtained during prior OU2 investigations were found to be due to the high dissolved uranium content in groundwater in and around OU2. Furthermore, the Gross Alpha values were corrected to exclude uranium and radon contributions in accordance with USEPA MCL guidance.
4. Isotopic ratios were calculated for all uranium results over the course of the LTM program to determine the provenance of the elevated levels. The ratio of U-234:U-238 was calculated to test whether the uranium may have undergone separation processing. The ratio of U-238:U-235 was examined to test whether the uranium had undergone enrichment or depletion processing, and the ratio of Total Activity to Total Mass was examined to test against USEPA's ratios for natural uranium. Examination of all of these ratios strongly supports the conclusion that elevated concentrations of uranium found in groundwater, surface water, and sediment are the result of naturally-occurring uranium species that have not undergone anthropogenic enrichment or processing.
5. A review of regional water quality has shown that uranium is particularly abundant in the Westerly Creek drainage basin directly upstream of OU2.
6. Comparison of upgradient versus downgradient concentrations of uranium in groundwater showed that the averaged uranium concentration is higher in the downgradient wells compared to the upgradient wells. The lines of evidence indicate that natural uranium occurring in streams has been preferentially deposited beneath OU2 in the geologic past. Modern streams exhibit this characteristic process in areas called hyporheic zones. In hyporheic zones, oxygenated water from streams is carried below and away from the stream sediments and into the underlying aquifer where oxygen is depleted. Under these changed geochemical conditions, uranium that was previously dissolved in the stream precipitates in

the hyporheic zone of the underlying aquifer. Conditions presented to support this conclusion for OU2 include:

- paleochannel sediments are eroded into bedrock beneath OU2;
- lower redox conditions exist in wells located in this paleochannel;
- elevated uranium concentrations in upstream surface water, and
- isotopic ratio evidence that the uranium has been transported in water.

7. The behavior of all uranium analytical results over the course of the LTM program were shown to be very stable, with same-well sample results showing little variance between 1Q and 4Q. This behavior was consistent across all LTM program wells, regardless of location, well construction, or screening depth. Groundwater flow direction and flux were very similar to those seen in historical sampling events. The groundwater flow direction and flux were similar in all four quarters of the LTM program.
8. Groundwater at OU2 has elevated levels of chlorides, sulfates, calcium, and sodium that are typical for the western United States and reflect higher loading of salts in irrigated regions. The groundwater at OU2 is a sodium-calcium-bicarbonate type. The only seasonal changes evident were changes in temperature, which slightly affect dissolved oxygen concentration because decreased temperatures allow increased oxygen solubility.

Based on the results of the LTM program, Cabrera concluded that the elevated uranium concentrations measured in OU2 groundwater, surface water, and sediment are due to the naturally-occurring uranium content of the regional watershed; not the result of waste burials in the former Lowry OU2 landfill.

For future post-closure groundwater monitoring at OU2, Cabrera recommended a simplified trending protocol consisting of gross alpha and gross beta analyses as surrogate indicators. These indicators will provide sufficient understanding of dissolved uranium concentrations in groundwater at OU2. LAC had previously included gross alpha and gross beta analyses as part of the CDPHE-approved OU2 post-closure monitoring suite of analytes.

The Air Force's post-closure monitoring results are under review by CDPHE. Upon approval of the OU2 Completion Report, LAC will initiate post-closure monitoring activities, including monitoring for radiological parameters, in accordance with the approved recommendations.

C. BUILDING 606

The Building 606, identified in Paragraph 18b of the Consent Agreement, is located in the northwest quadrant of LAFB, approximately 325 feet south of 8th Avenue and 250 feet west of Uinta Way. Based on a map published in March 2004 in the *Final Fifth Quarter Groundwater Monitoring Results, Former Building 606* (Earth Tech, 2004) the area of contaminated groundwater is less than 0.2 acre in extent (Figure 2-2).

Before being demolished in 1997, Building 606 was the former Base Exchange gas station that distributed gasoline for personal vehicle use. The Base Exchange operated four 10,000-gallon underground storage tanks (USTs) containing unleaded gasoline that were removed in 1996. A CAP for the Site was submitted to the Division of Oil and Public

Safety (OPS) in 2001. In accordance with the OPS approved CAP, approximately 3,576 cubic yards of petroleum-contaminated soils were removed from two excavations at the Site in February 2002. The contaminated soils were transported off-site for disposal. Immediately following excavation activities, ORC® was mixed into the saturated soil and groundwater at the base of the excavations. The excavations were backfilled with pea gravel and clean stockpiled soil. The ground surface was then graded to the surrounding contours.

In November 2002, seven groundwater monitoring wells were installed to satisfy the requirements of the OPS approval of the CAP. These seven wells were sampled in November 2002, February 2003, May 2003, August 2003, and January 2004, and the samples analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX), total petroleum hydrocarbons (TPH), and monitored natural attenuation parameters. The field activities and results from these sampling events are presented in the first through the fifth quarterly groundwater monitoring reports submitted to the OPS (Earth Tech 2003a, Earth Tech 2003b, Earth Tech 2003c, Earth Tech 2003d, and 2004).

Groundwater monitoring data collected from 2003 through June 2005 are presented in Tables 2 and 3 of the Remediation Work Plan for former Building 606, submitted by LAC to CDPHE on January 31, 2006. The groundwater concentration data for the January 2004 event indicate that two wells (MW-01 and MW-03) have consistently been reported above the 5 micrograms per liter (ug/L) CBGWS for benzene. All other site wells (MW-02, MW-04, MW-5, MW-06, and MW-07) have been reported at non-detect or well below Colorado Basic Groundwater Samples for all sampling events. In general, historical benzene concentrations reported for well MW-01 indicate an overall declining trend since 2002. Historical benzene concentrations for well MW-03 indicate an overall decreasing trend from 2002 through 2005 although the January 2004 event indicated a temporary increase in benzene to 260 ug/L. During the most recent monitoring event in June 2005, the groundwater sample from monitoring well MW-01 (located in the former UST excavation) exhibited a benzene concentration of 23 ug/L, and the sample from monitoring well MW-03 exhibited a benzene concentration of 12 ug/L. TPH-GRO concentrations from these two wells have been relatively stable since 2002. No structures are currently located immediately above the area with known groundwater contamination. No free product has ever been observed in groundwater at Building 606.

D. OUTDOOR FIRING RANGE (OFR)

The OFR, identified in Paragraph 18c of the Consent Agreement, is located west of Dayton Street and south of East 6th Avenue. Investigations for potential environmental concerns in soil at the OFR were initiated in 1998 (Versar, October 1998; November 1998) (Figure 2-3). Previous work at this site included evaluation of the potential for ordnance and explosives (OE) hazards by the U.S. Army Corps of Engineers (USACE), Huntsville District in 1995 (USACE, October 1995; December 1995).

Operations at the OFR began in the early 1940s and continued until at least the early 1960s (Halliburton NUS, 1993). In 1995, the USACE (1995) inspected the site and identified expended pistol ammunition, .30-caliber rifle ammunition, and a few expended .50-caliber and

20-mm bullets on the surface throughout the site. An investigation of the heavy metals in soil was initiated in 1998; groundwater was also sampled under the OU5 and EBS Phase II programs to support the OFR investigation (Versar, October 1998). In 2000, additional investigations were planned to address data gaps (Versar, October 2000), but the proposed work was not implemented. In 2003, a supplemental characterization was conducted. The *Final Remedial Investigation Report for Supplemental Characterization, Outdoor Firing Range, Lowry Air Force Base, Colorado* (CH2M HILL, October 2003) presents the results of the supplemental characterization and describes the nature and extent of contamination at the site. The results of the supplemental characterization confirm that lead and excess metal fragments from firing operations are located in the bermed soil west and east of the concrete backstop walls. In addition, 20-mm target practice projectiles were also identified in one portion of the firing range berm.

E. THE FORMER FIRE TRAINING ZONE (FTZ)

The FTZ identified in Paragraph 18d of the Consent Agreement, is located on the eastern side of LAFB within the City and County of Denver and the City of Aurora, and is bounded by East 1st Avenue to the north and Havana Street to the east, and covers approximately 50 acres. The site is located adjacent to and within the Mira Vista Golf Course.

The FTZ was used by the Air Force for fire fighting training activities from 1946 through 1980, with most large-scale fire training activities ending after 1965 or 1966. Training exercises included placing contaminated waste materials and fuel on old aircraft or aircraft fuselages, or spreading fuel over the burn area, and igniting it during fire training exercises.

From 1984 to 2002, several sampling programs were conducted at the FTZ to investigate potential contamination to soil and groundwater from fire fighting training activities, as well as from use of the site as an Air Force golf course. The sampling programs showed that no widespread soil contamination resulted from former fire fighting training activities or from the use of the property as an Air Force golf course. In limited areas of the site, as described below, polychlorinated dibenzo-p-dioxins (PCDDs), polychlorinated dibenzofurans (PCDFs), and polynuclear aromatic hydrocarbons (PAHs) were identified as chemicals of concern in soil (Figure 2-4).

F. BUILDING 898

Building 898 (1942-2004), identified in Paragraph 18e of the Consent Agreement, was a former dispensary and dental clinic, located in the northeastern corner of the LAFB (Figure 1-1). The building is currently used for storage, primarily gardening equipment utilized at the community garden located on the adjacent property. Based on the *Phase III EBS Mercury Survey Report* (Versar, 1999), levels of mercury vapor measured in breathing zone air in September 1997 precluded unrestricted use of the building. The Air Force conducted additional sampling in January 2002 to: 1) determine whether removal of the primary sources (e.g., sinks and associated piping) would lower mercury vapor concentrations to levels permitting unrestricted use; 2) determine whether potential secondary sources are emitting mercury vapor to building air at levels precluding unrestricted use; and 3) assess potential mercury contamination of soil and building materials in the crawlspace. The investigation consisted of screening breathing

zone air, crawlspace air, flooring materials, sinks, and piping for mercury vapor; and collecting samples of breathing zone air for laboratory analysis. The results indicated removal of the sinks and piping would likely lower mercury vapor concentrations in breathing zone air to levels permitting unrestricted use. However, mercury associated with flooring materials could pose a risk, particularly to young children. Elevated mercury vapor levels were not detected in the crawlspace. As indicated by the *January 2002 Investigation* (Versar, December 2002), additional sampling and/or remediation of building materials is needed to warrant transfer of the building without use restrictions.

G. ABANDONMENT OF TWO (2) DEEP WELLS

Two (2) deep wells, identified in Paragraph 18f of the Consent Agreement, need to be properly decommissioned in accordance with the regulatory requirements of the State of Colorado, Office of the State Engineer. The two water supply wells were installed at LAFB during 1955 and 1956 and were used by the Air Force for irrigation purposes until 1976 (Figure 1-1). The one LAFB water supply well was drilled in June 1955 and completed to a depth of 2,023 feet in the Laramie-Fox Hills aquifer. The other LAFB water supply well was drilled September-October 1956 and completed to a depth of 2,000 feet and was also completed in the Laramie-Fox Hills aquifer.

In 1989, the Air Force rendered the wells inoperable by cutting the production tubing at the surface and allowing the tubing and pump assembly to fall down the well annulus. It is not known if the pump and tubing assembly fell to the bottom of the production casing in either well so the depth to the top of the production tubing is not known. Each well annulus was then filled with sand and the top five feet of steel surface casing were sealed with concrete. The locations of both wells have been identified and the surface casing for each well has been uncovered.

H. ADDITIONAL INVESTIGATION ASSOCIATED WITH RCRA FACILITY ASSESSMENT (RFA)

As noted in the Introduction Section of this Plan, the Draft Final RFA was submitted to the CDPHE in January 2005. All Known and Unknown Conditions, as those terms are defined in the Cooperative Agreement, identified through the RFA will be addressed as part of this First Amendment. Although additional concerns may be identified, the following is a list of known soil conditions that warrant further investigation and potential remedial activities (Figure 1-1). Groundwater conditions will be address under Lowry 1.

1. Building 416 (1016)

This facility is within the boundary of the FTZ and was used for munitions maintenance and training. Two possible 1,000-gallon USTs were identified that were used to supply diesel/heating oil to the facility in 1944 (unnumbered vessels). An attempt to identify the USTs was unsuccessful as part of the Phase III EBS VSI. Notes copied from the U.S. Army Corps of Engineers (USACE) offices also indicated that two 10,000-gallon steel gasoline USTs and pumps were installed (HQ Lowry Field, Denver, CO 1946). No other information about these tanks has been obtained. Based on information obtained during interviews, this facility may have been used as an engine run-up facility during WWII (1942-1945). Testing would run for up

to 48 hours, which may explain the need for two large USTs. An 8-foot by 25-foot UST "formerly used for fire training" was removed by Tarco, Inc. and documented in a letter dated November 2, 1989. Tarco indicated that the UST was "well rusted." It could not be determined whether any additional investigation relating to a release from this UST had been conducted.

Further investigation is recommended at this former building to address the potential presence and impact from the reported two 10,000-gallon USTs and the potential release from the UST removed in 1989. It is recommended that efforts be made to locate the two 10,000-gallon USTs and assess whether a release has occurred from these tanks. This site also overlies a groundwater plume that is being remediated under activities associated with OU5. The septic tank was reportedly pickled in 1963. The RFA recommended no further action for both the septic tank and leach field.

2. Building 546

Building 546 was constructed in 1941 in part of the hospital area complex in the northwestern portion of LAFB. It was used as a dental clinic and was demolished in 1964. Therefore, mercury in any remaining subsurface pipe or soil could be a potential environmental concern.

3. Building 568

Building 568 was also constructed in 1941 in part of the hospital area complex in the northwestern portion of LAFB and was removed between 1970 and 1975. Originally used for Nurse's Quarters, the 1955 building schedule identifies that it was used for a specialized medical clinic. Other information identified the building as the Air Force Eye and Dental Clinic. Again, mercury in any remaining subsurface pipe or soil could be a potential environmental concern.

4. Building 753

Building 753 was constructed in 1943 and used as a dental clinic by both the Air Force and the CCCS. The building is located in the northeastern portion of LAFB. Mercury survey field activities were performed in September and November 1997, and June, August, and September 1998. Results of this investigation indicated that mercury vapor concentrations in air in the breathing zone were below the exposure limits of OSHA, NIOSH, and ACGIH, but exceed the risk-based maximum concentration allowable for protection of children in a daycare setting. The Base Cleanup Team did not believe that sufficient evidence of releases to floor coverings existed to warrant remediation based upon its current use. There are currently no use restrictions on this property.

5. Building 1496A

This building was located adjacent to Building 1499 in the center of LAFB and was associated with training activities. Based on the small size of the building, it was likely used for storage. The building number changed to 1493 in 1965, and it was subsequently used for Administration and Technical Training Support. This facility had multiple gasoline pump pits and a 5,000-gallon gasoline UST. No information is available regarding removal of this tank. The CDPHE

performed a radiological survey for LERA based on past uses of this facility for training activities and concluded that no further action was required for radiological concerns. Additional investigation is recommended for this facility to try to locate the UST. The historical use of the facility for gasoline distribution could have resulted in contamination in the fueling area and UST locations. No documentation of removal and closure of the UST were found during the RFA records search.

6. Building 1499

Building 1499, currently the Big Bear ice arena, is located in the center of LAFB and was used for training activities associated with the guided missile school and formerly housed the Nuclear Weapons Training School, beginning in the late 1950s. Training activities involved the use of training aids made of depleted uranium. The building later contained classrooms and was used for administration purposes. Additional investigation includes identifying more specific information on activities that occurred in Building 1499 and the potential disposal of solvents, such as TCE, to the groundwater and soil in the vicinity of the building.

7. The Air Force designated area PAA_2

A waste area was identified on a site location map dated April 9, 1952. This waste area is located west of Dayton Avenue and north of the OFR, and is currently owned by the Air Force. The 1952 aerial photograph shows what appears to be debris at the end of a small roadway south of a structure that later became Building 1002. The debris area and the road are not present in the 1948 or 1955 aerial photographs. This area appears to be an undocumented dumping or staging area that was in use for a maximum of seven years (between 1948 and 1955). There is no record that an investigation of the area has been conducted. Environmental concerns associated with this area will depend on the material potentially disposed, but could include petroleum products, solvents, asbestos, etc. Further investigation is recommended in this area to assess whether a release has occurred from the former dumping or staging activities.

8. Building 777

Building 777 was formerly used as a correctional facility workshop and more recently as an Area Dental Laboratory. The facility is currently part of the Logan School for Creative Learning and is located just south of East 11th Avenue and west of Yosemite Street. Environmental concerns may exist regarding beryllium dust associated with the finishing of dental bridges during this facility's use as one of the four Air Force-wide area dental laboratories. On December 29, 2005, the CDPHE requested LAC provide additional information regarding the asbestos abatement and renovations at Building 777. Logan School's renovation included demolition of all interior walls prior to reconstruction of the interior. During the reconstruction, the main air handling equipment was left in place while interior ducting was reconfigured.

Asbestos abatement in the building was performed between May 23 - May 27, 2005 and included removal and disposal of all existing floor tile and adhesive, as well as the removal of any remaining asbestos containing pipe-fitting insulation. The abatement was performed by a CDPHE-certified contractor, Risk Removal, Inc., under permit number 04AR2707N. Air

monitoring and clearance sampling were performed by a CDPHE-certified Air Monitoring Specialist. Clearance air samples were all below the Minimum Allowable Asbestos Levels (MAAL) of 0.01 fibers per cubic centimeter (four of the five were below detection limit) demonstrating the completeness of the asbestos abatement within CDPHE guidelines.

Logan School also performed air sampling for beryllium following the asbestos abatement project, collecting five air samples in the building, one sample outside of the building, and one blank sample. The analyses of the air samples were performed by Evergreen Analytical Laboratory (EAL) in Wheat Ridge, Colorado and met the requirements of the standard EAL Quality Assurance program. There were no detections of beryllium in the samples. The results for all seven samples were less than 0.025 µg per filter, which converts to <0.04 µg/m^3 based on the 625 liter sample volume. This detection limit is almost an order of magnitude lower than the American Conference of Government Industrial Hygienists and the Department of Energy worker protection level of 0.2 ug/m^3 for beryllium, and is in the range of the U.S. Environmental Protection Agency's (EPA) reference concentration of 0.02 ug/m^3 and EPA's ambient air protection level of 0.01 ug/m^3.

9. Potential PCB Contamination

Through the RFA, fifteen (15) existing facilities reportedly stored or used PCB-containing transformers during LAFB's operational history. These facilities include Buildings 349, 353A, 354, 359, 361, 383, 401, 811, 850, 901, 903, 905, 959, 999, and 1499. The buildings with 300 and 400 series numbers are located south of East 6th Avenue and west of Uinta Way. The buildings with 800 and 900 series numbers are located in the northeastern portion of LAFB and are part of the CCCS.

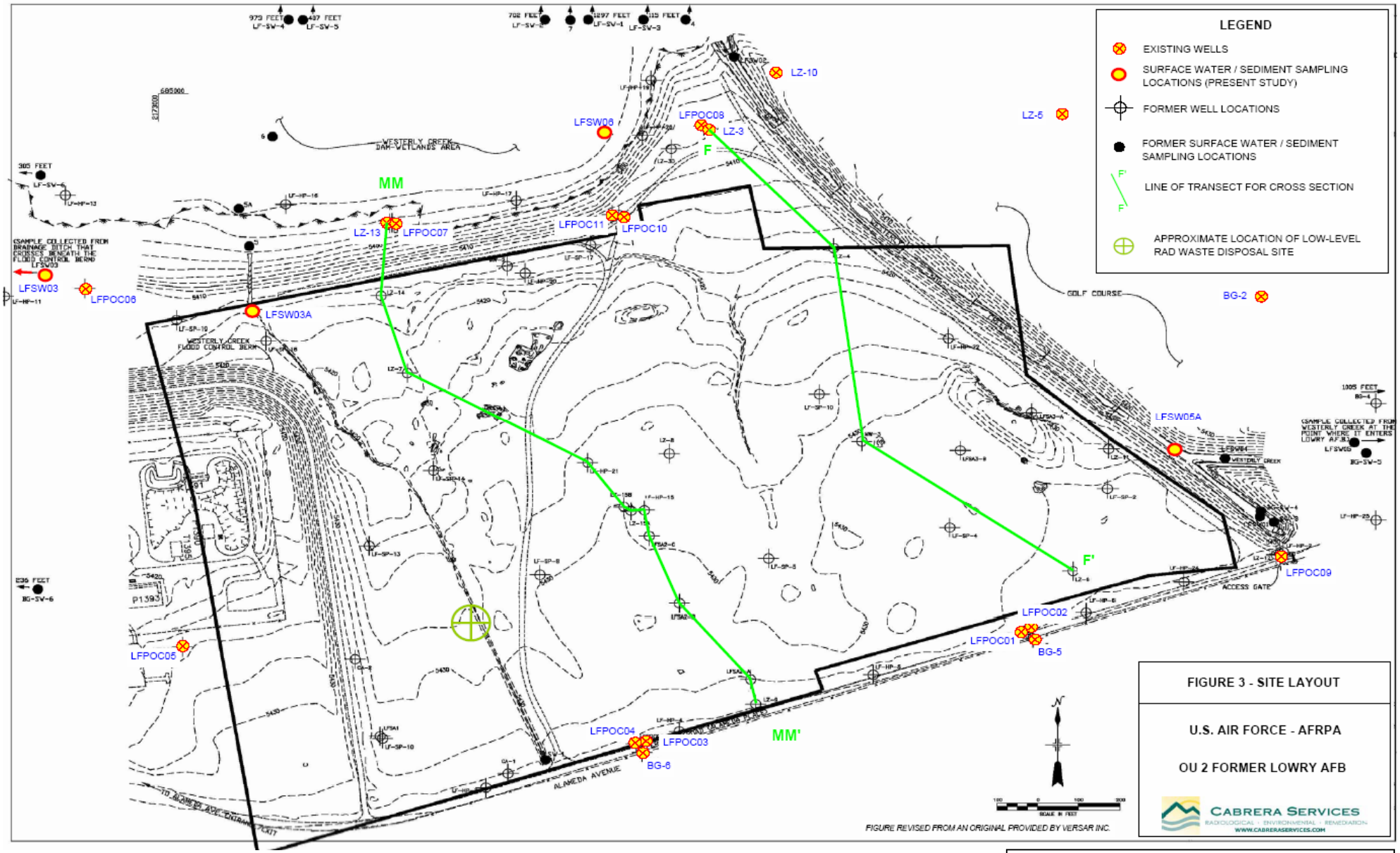
I. ASBESTOS CONTAMINATED SOIL WITHIN THE NORTHWEST NEIGHBORHOOD (NWN)

Fourteen acres of formerly Air Force owned property will be sampled for asbestos in accordance with the Compliance Advisories issued by the CDPHE in April 2003. This area is located north of East 8th Avenue, west of Uinta Way, south of East 11th Avenue, and east of Spruce Court and Ulster Way (Figure 1-1, FOSET Parcel 1). Compliance Order (No. 04-03-24-01) to the Air Force requiring that the Air Force execute the Compliance Advisories that included sampling, emissions control, and response plans related to asbestos.

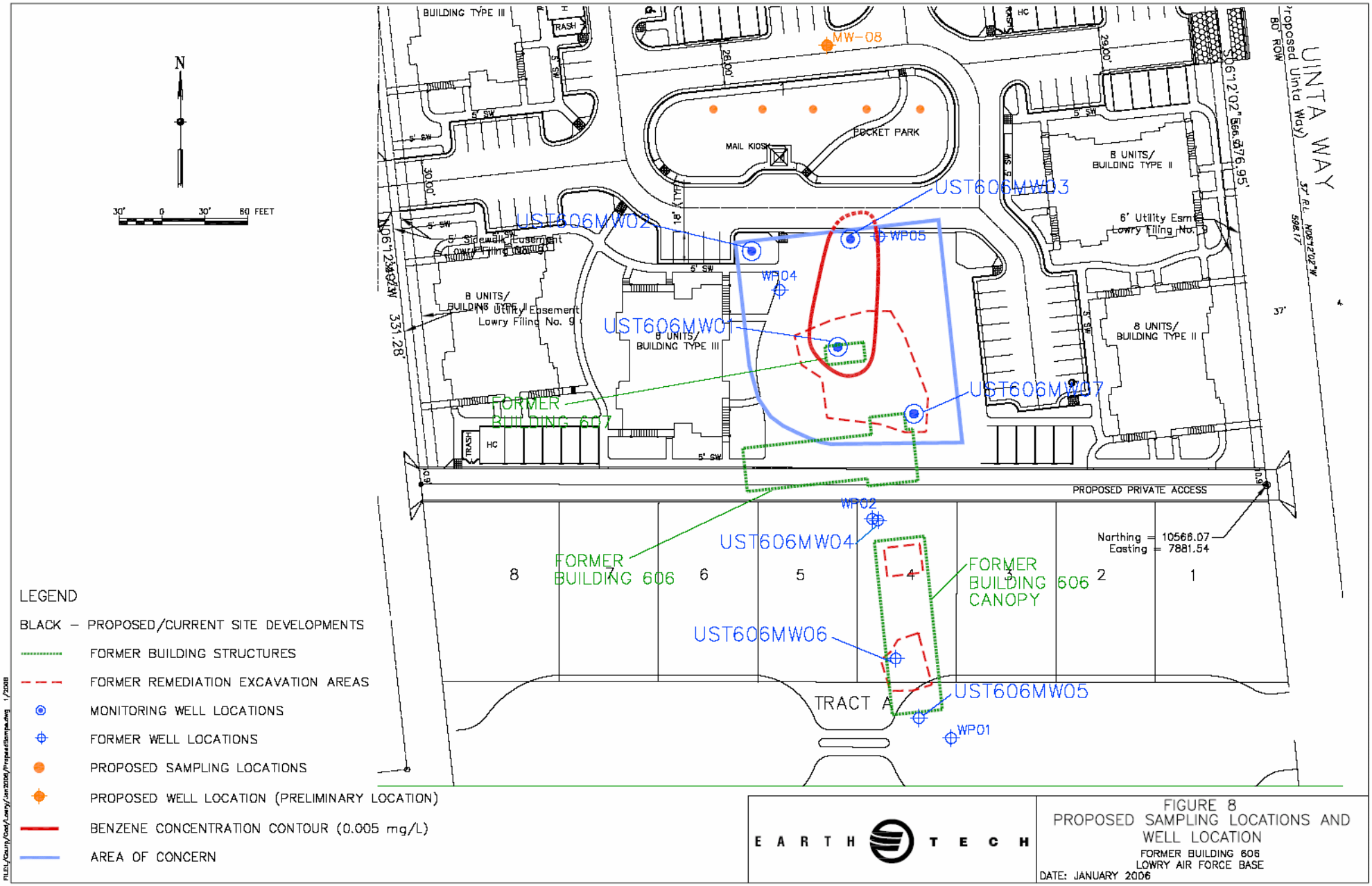
The Compliance Advisories address asbestos found in the surface and subsurface soil in portions of the NWN partially related to a hospital complex of buildings that was the property of, and was demolished by, the Air Force between 1963 and 1975. The complex of buildings included the LAFB hospital, which was built in the 1940s, and the hospital's steam heating plant (former Building 561). The steam lines associated with the steam heating plant may have been wrapped in asbestos-containing insulation. Historical records indicate that a number of structures and facilities associated with the hospital complex were demolished between 1959 and 1975. Material containing asbestos found in the soil in the NWN include transite water pipes, some gas pipes, insulation material, and floor tile.

To date, the Air Force has conducted the indoor sampling for asbestos at Buildings 667 and 670 requested by the CDPHE, along with some limited sampling for asbestos in soil on this FOSET Parcel. The sampling at Building 670 was conducted using the State-imposed NWN compliance advisory protocol; however, sampling conducted on portions of Filing 16 and 670 North did not follow those compliance advisory sampling protocols. Building 670, currently owned by the Air Force, leased by the City and County of Denver, and occupied by Mile High Child Care Services, was sampled and remediated for asbestos in soil in accordance with the Compliance Advisories, and issued a No Further Action Letter on January 5, 2005.

In November 2003, sampling by the Air Force in Filing 16 found asbestos fibers in four of the twelve surface and subsurface soil samples. The Air Force also collected a number of surface and subsurface soil samples at Filing 16 and 670 North in 2003 and 2004. The 2004 sampling program was to serve as a basis for the risk assessment simulation studies.



Final Transition Plan II
November 21, 2006
Figure 2-1
Lowry Assumption, LLC



LEGEND

BLACK – PROPOSED/CURRENT SITE DEVELOPMENTS

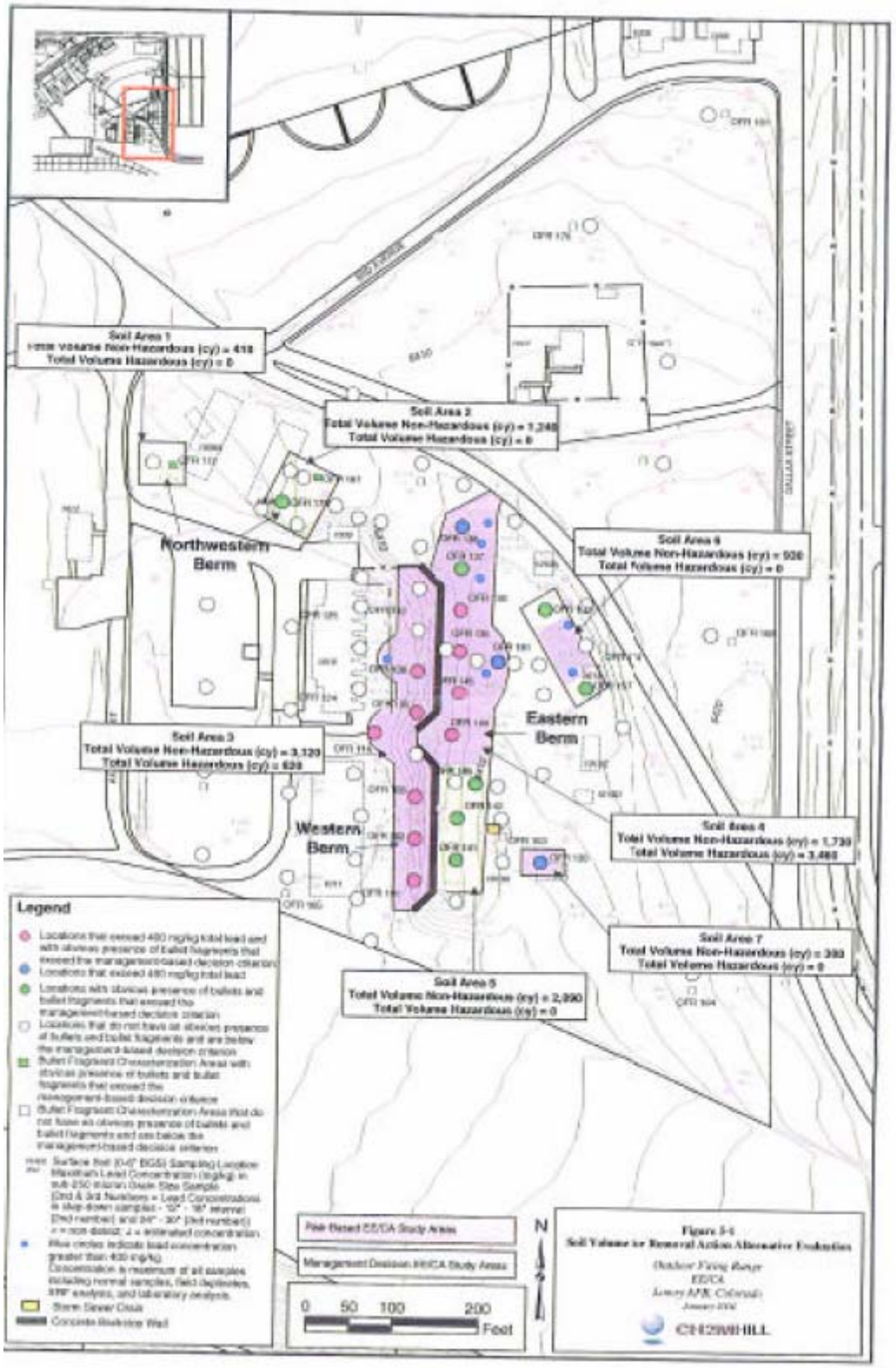
- FORMER BUILDING STRUCTURES
- FORMER REMEDIATION EXCAVATION AREAS
- MONITORING WELL LOCATIONS
- FORMER WELL LOCATIONS
- PROPOSED SAMPLING LOCATIONS
- PROPOSED WELL LOCATION (PRELIMINARY LOCATION)
- BENZENE CONCENTRATION CONTOUR (0.005 mg/L)
- AREA OF CONCERN

FILE:/County/Cad/Lowry/Jan2006/ProposedSamples.dwg 1/2006

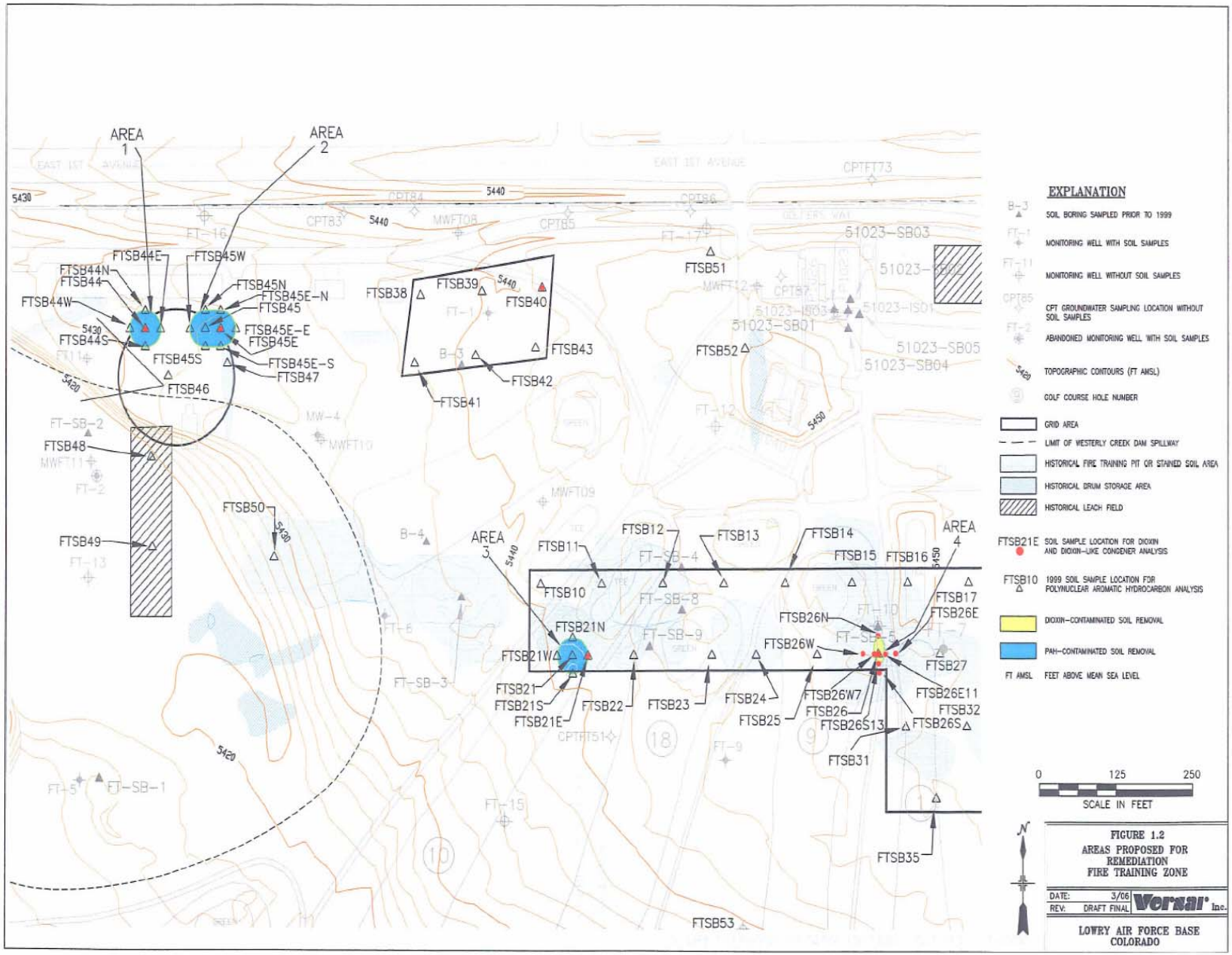
EARTH TECH

FIGURE 8
PROPOSED SAMPLING LOCATIONS AND WELL LOCATION
FORMER BUILDING 606
LOWRY AIR FORCE BASE
DATE: JANUARY 2006

Final Transition Plan II
November 21, 2006
Figure 2-2
Lowry Assumption, LLC



Final Transition Plan II
November 21, 2006
Figure 2-3
Lowry Assumption, LLC



Final Transition Plan II
November 21, 2006
Figure 2-4
Lowry Assumption, LLC

III. DESCRIPTION OF ANTICIPATED FUTURE USE AND LERA'S REUSE PRIORITIES

The purpose of this section is to provide a description of the anticipated future use of the FOSET Parcels and the LERA's reuse priorities.

A. PARCEL NO. 1 (east portion of Northwest Neighborhood)

The Lowry Reuse Plan dated November 1993 (Lowry Reuse Plan) identified this area as residential with the exception of the area associated with Building 667. This parcel is located within the Northwest Neighborhood Compliance Advisory area addressing asbestos in soil issues. In addition, this parcel is impacted by TCE contaminated groundwater (OU5 – Base-wide Groundwater). A State Environmental Covenant was recorded on January 18, 2006, which addressed OU5 (See Exhibit 1). Figure 3-1 shows the future development of this area overlaid with the current groundwater plume boundary map.

Building 670, currently owned by the LERA, is leased to the City and County of Denver and is occupied by Mile High Child Care Services. The LERA anticipates transferring this parcel to City and County of Denver in the second quarter of 2006. The building has been renovated and is being used for a 120-student early education center, including a Head Start program. There was asbestos sampling and remediation on the soil surrounding Building 670. CDPHE issued a No Further Action Letter to the City on January 5, 2005. The future use of this building will likely remain child care in the existing building.

The property known as 670 North, located northeast of Building 670 is currently owned by LERA. LAC will perform sampling and remediation on the parcel as required under the Compliance Advisory. Following approval by the CDPHE Colorado Land & Home Company (Colorado Land) will construct 12 town home units on the property. The LERA has requested that LAC make 670 North a priority for sampling and remediation. In addition, Colorado Land has an Oversight Agreement executed with LAC to provide construction oversight associated with their excavation activities.

Building 667 is currently being used by the Air Force Real Property Agency (AFRPA) for file storage, and the Defense Finance Accounting Service (DFAS) is also using some of the space under two separate subleases with the LERA. Building 667 was designated by the Lowry Reuse Plan as "community service," which includes offices; entertainment activities; retail establishments; restaurants; medical/dental offices; churches; museum/cultural facilities; daycare; and public service facilities (police, fire).

LAC is leasing a portion of this building from the LERA. This property is currently under contract for sale to IRG Redevelopment I, LLC (IRG Redevelopment). Redevelopment planning is underway for this parcel.

Residential construction is planned for the remaining FOSET Parcel No. 1 property, where Capital Pacific will construct 46 single-family homes. LERA hopes to deliver this property to the builder phases during the spring and summer of 2006.

B. PARCEL NO.2 (Operable Unit 2 - Landfill Zone)

The Lowry Reuse Plan identified the area associated with the landfill as golf/regional open space. This definition includes active recreation areas (outdoor and indoor facilities); youth and/or senior center, museum, cultural activities; passive recreation (parks, open space, flood control); urban wildlife area and flood control area; and a golf course. This area is currently planned for passive recreation, possibly with a golf course north of the landfill, surrounding the wetlands. The current implemented remedy for the landfill supports passive recreation use only, including parks, open space, or flood control. A State Environmental Covenant associated with the landfill was recorded on January 18, 2006 (See Exhibit 2).

The landfill was transferred to IRG Redevelopment I, LLC on January 19, 2006. IRG Redevelopment I, LLC has indicated to the CDPHE that it may seek to change the land use from open space to allow a potential use the property for mixed use; a combination of residential and commercial/retail uses. However, in order to make such changes to the land use, there would need to be significant review by the State and the City and County of Denver as well as modification of the environmental covenants and the current remedy (the landfill cover). All parties recognize that any modification to the environmental covenants will need to be done in accordance with Federal, State and local laws and regulations, including public comment, and in a manner that is protective of human health and the environment.

C. PARCEL NO. 3 (Headquarters/Town Center Area)

The Lowry Reuse Plan identified this area as a Business Training Center, which includes: classrooms; laboratories; office or administrative space; light industrial (not warehouse/distribution or smokestacks); research (labs and development space); and supporting commercial space (retail, entertainment, business services). This parcel is impacted by TCE contaminated groundwater. A Restrictive Use Covenant was placed on this parcel on June 4, 2001 (See Exhibit 3), and a State Environmental Covenant associated with OU5 was recorded on January 18, 2006 (See Exhibit 1).

This parcel is known as the Lowry Town Center and contains primarily commercial and retail space and one school. The Lowry Tavern, to be owned by Francis Shultz, is currently under construction at the former Building 385. It is scheduled to open in the summer of 2006. The majority of this parcel is currently under a direct lease by and between LERA and Weingarten/Miller/Lowry Joint Venture dated July 3, 2001. The LERA plans to convey this property to Weingarten/Miller/Lowry Joint Venture by Special Warranty Deed in the 2nd quarter of 2006. Stanley British Primary School, the Broe Company and the American Legion will also receive deeds to their property.

D. PARCEL NO. 4 (Main TCE Plume Area)

The Lowry Reuse Plan identified this area as flood control; regional parks and open space; golf course; mixed use/active recreation; and residential. Currently, this area is vacant. This parcel is impacted by the Main TCE Plume. A State Environmental Covenant was recorded on January 18, 2006, which addressed OU5 (See Exhibit 1). Figure 3-1 shows the future development of this area overlaid with the current groundwater plume boundary map.

The northern portion of this area, north of Lowry Boulevard, will be the Great Lawn open space and Kelly Road Dam natural area and wetlands, and will be transferred to the City and County of Denver. This may include, among other things, Westerly Creek regional trail, a group picnic shelter and playground, a prairie river water feature in Westerly Creek, a foothills grove of trees, a wetlands water quality area and park, native grass areas, a mountain and park overlook, a channel crossing, a restroom, a ½ basketball court, and park furnishings. Construction on the park by the LERA is scheduled to begin in Spring 2006.

The area south of Lowry Boulevard is the last stage of the LERA's redevelopment efforts at LAFB, known as Lowry East. The Lowry Reuse Plan identifies this area as flood control; regional open space; golf course and residential. Past uses of this area by the Air Force included the former Coal Storage Area East, former Skeet and Trap Ranges, and former OFR. In addition, this area overlies a portion of the Main TCE Plume, (see RFA Figure 3-9 Response Actions).

The LERA has phased the rest of the redevelopment of this area, starting in February 2006 through the last conveyances to builders in Spring of 2008.

E. PARCEL NO. 5 (Fire Training Zone)

The Lowry Reuse Plan identifies this area as golf course and residential. This area is currently being utilized as a golf course (Figure 3-1) This property is owned by the Colorado Golf Association, and the future use of this area will be golf course use, open space, and golf buildings (pro shop, restaurant, maintenance facility). Planning is underway by CGA for renovation of the golf course. The Red Cross building, Bldg 1024 has been sold to the CGA. A State Environmental Covenant addressing the fire training zone was recorded on January 9, 2006, (See Exhibit 4).

F. PARCEL NO. 6 (Building 606 Area)

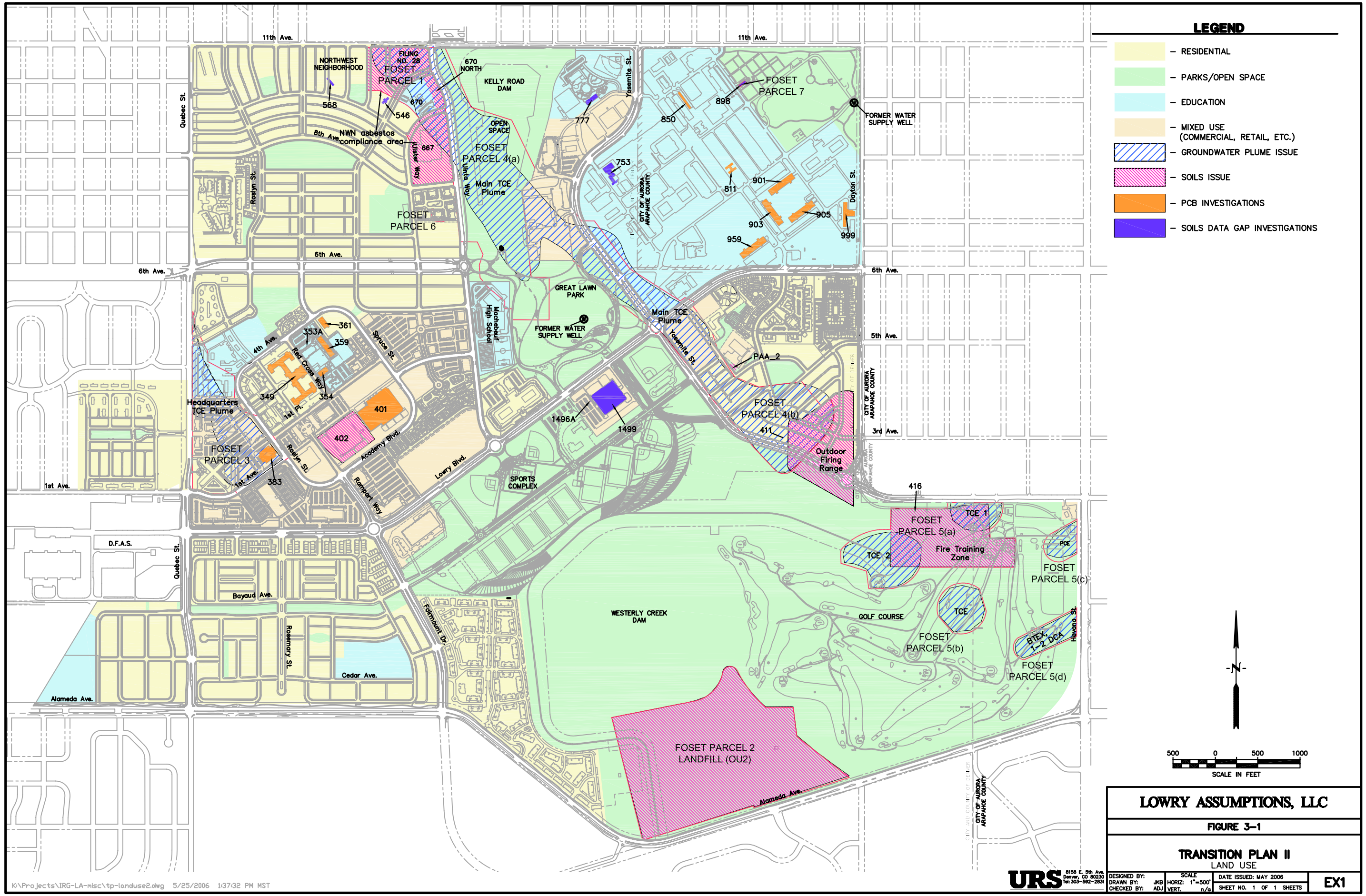
The former location of Building 606 was identified in the reuse plan as residential. Currently, the property immediately adjacent to this area has been redeveloped into single-family homes, condominiums, and parks/open space (See Figure 2-2). This remaining property is planned to for a condominium development consistent with adjacent buildings and the Lowry Reuse Plan. The LERA would like transfer of this parcel as soon as practicable after LAC implements its current Remediation Work Plan and monitoring.

G. PARCEL NO. 7 (Building 898 area)

Building 898, Figure 3-1 is identified as a park in the Lowry Reuse Plan. This building is scheduled for demolition as part of the response action for this site. Reuse of this area will be consistent with the Lowry Reuse Plan. This property is part of the Aurora Parks and Recreation property, and the building is eligible for registration as a Historic Building. LAC will work with the State Historic Preservation Officer to discuss LAC's anticipated scope. The LERA would like to transfer this parcel to Aurora prior to April 4, 2006.

OTHER AREAS – Air Force Designated area PAA_2

The future use of PAA_2 is anticipated to be either open space or an extension of a parking area for an existing adjacent Colorado Historical Society building.


LEGEND
– RESIDENTIAL
– PARKS/OPEN SPACE
– EDUCATION
– MIXED USE (COMMERCIAL, RETAIL, ETC.)
– GROUNDWATER PLUME ISSUE
– SOILS ISSUE
– PCB INVESTIGATIONS
– SOILS DATA GAP INVESTIGATIONS
11th Ave.
NORTHWEST NEIGHBORHOOD
FILING NO. 28
FOSET PARCEL 1
670 NORTH
KELLY ROAD DAM
Yosemite St.
FOSET PARCEL 7
FORMER WATER SUPPLY WELL
Quebec St.
568
670
546
777
850
898
8th Ave.
NWN asbestos compliance area
667
Upton Way
OPEN SPACE
FOSET PARCEL 4(a)
753
811
901
903
905
959
999
Doyton St.
Roslyn St.
Main TCE Plume
FOSET PARCEL 6
CITY OF AURORA ARAPAHOE COUNTY
6th Ave.
GREAT LAWN PARK
Machebeuf High School
FORMER WATER SUPPLY WELL
5th Ave.
PAA_2
361
353A
359
Spruce St.
4th Ave.
Red Cross Way
Main TCE Plume
Yosemite St.
349
354
1st Pl.
401
1496A
1499
FOSET PARCEL 4(b)
411
Headquarters TCE Plume
402
Academy Blvd.
3rd Ave.
Outdoor Firing Range
FOSET PARCEL 3
Roslyn St.
1st Ave.
383
Rampart Way
Lowry Blvd.
SPORTS COMPLEX
416
FOSET PARCEL 5(a)
TCE 1
TCE 2
Fire Training Zone
PCE
FOSET PARCEL 5(c)
D.F.A.
Quebec St.
Bayaud Ave.
WESTERLY CREEK DAM
GOLF COURSE
TCE
FOSET PARCEL 5(b)
BTEX 1-2 DCA
Havana St.
FOSET PARCEL 5(d)
Rosemary St.
Fairmount Dr.
Cedar Ave.
Alameda Ave.
FOSET PARCEL 2 LANDFILL (OU2)
Alameda Ave.
CITY OF AURORA ARAPAHOE COUNTY
500 0 500 1000
SCALE IN FEET
LOWRY ASSUMPTIONS, LLC
FIGURE 3-1
TRANSITION PLAN II
LAND USE
URS 8158 E. 5th Ave. Denver, CO 80230 Tel: 303-592-2831
DESIGNED BY:
DRAWN BY: JKB
CHECKED BY: ADJ
SCALE HORIZ: 1"=500' VERT. n/a
DATE ISSUED: MAY 2006
SHEET NO. 1 OF 1 SHEETS
EX1
K:\Projects\IRG-LA-misc\tp-landuse2.dwg 5/25/2006 1:37:32 PM MST

IV. CORRECTIVE ACTION PROCESS

A. DESCRIPTION OF CORRECTIVE ACTION PROCESS AT LOWRY

The Corrective Action Process for the LAFB is defined in the Consent Agreement and includes a number of actions that may be performed to investigate, remediate, and confirm closure of the site. For all proposed activities and other activities agreed to as part of the Consent Agreement, including but not limited to further characterization of contamination or remedy evaluation, LAC will submit work plans pursuant to the schedules contained in the approved Transition Plan, for CDPHE review and approval prior to implementation. These work plans will detail the scope of the proposed activities and will be discussed with CDPHE during preparation to assure that CDPHE is in conceptual agreement with the intent and content of the plan when it is submitted.

CDPHE shall notify LERA and LAC in writing of its approval, approval with modifications, or disapproval of all work plans. In the case of approval with modifications, LAC is only required to resubmit those sections of those submittals that were not approved, unless otherwise requested by CDPHE. If, after review of the work plans above, CDPHE disapproves any work plan, LAC shall submit, within forty-five (45) days of receipt of this determination, a revised work plan.

The following sections summarize the corrective action items identified in Paragraphs 18 through 18i of the Consent Agreement. Further details on activities will be included in the individual work plans for each of these items. Figure 4-1 illustrates the proposed schedule of activities associated with these items.

B. REMEDIAL/REMOVAL ACTIONS

This section identifies those areas that have either been previously investigated and characterized, and received concurrence from CDPHE for implementation of the selected remedy or are currently being investigated and characterized by LAC.

1. Outdoor Firing Range (OFR)

CDPHE concurred on February 17, 2004, with the Draft Final Action Memorandum for the OFR submitted by the Air Force, which described a non-time-critical action for soil containing lead, bullet fragments, and potential ordnance at the OFR. The removal action include surface and subsurface ordnance clearance, and excavation, stabilization, and offsite landfill disposal of lead-impacted soil.

On February 16, 2006, LAC received CDPHE approval on the *Final Remediation Work Plan for the Outdoor Firing Range* (LAC, 2006). The objective of this work was to achieve a clean regulatory closure to residential standards for issues associated with the historical activities at the OFR. The scope of work included the clearance for Munitions and Explosives of Concern (MEC) to be conducted in accordance with Attachment A of the Final Remediation Work Plan; excavation of lead-impacted soil from the three work areas; post excavation sampling and analysis; soil sifting/screening to remove any MEC; chemically stabilizing lead-impacted soil to less than 5.0 milligrams per liter (mg/l) TCLP lead in order to meet the RCRA disposal requirements as a non-hazardous material; waste loading, and off site disposal. Implementation

of the work plan began in February, and was completed in April 2006. A No Further Action recommendation was approved by CDPHE on June 21, 2006.

2. Fire Training Zone

In November 2003, CDPHE and USEPA concurred with the proposed removal action submitted by the Air Force in the *Revised Draft Final Action Memorandum for the Fire Training Zone* (Versar, November 2003). LAC submitted a Work Plan for implementation of the selected remedy, which was approved by CDPHE and implementation began in March 2006.

LAC excavated, manifested, transported, and disposed of the previously defined areas of polynuclear aromatic hydrocarbon (PAH) and dioxin/furan-contaminated soil, collected analytical samples as specified to verify the cleanup standards have been met, and restored the excavated areas in accordance with the Mira Vista Golf Course requirements. The work was completed in March 2006, and CDPHE issued a No Further Action letter on May 5, 2006.

3. Building 606

On January 31, 2006, LAC submitted a Letter Work Plan for Groundwater Remediation associated with the former Building 606 (EarthTech, 2006). The objective of this action is to enhance the attenuation of benzene in groundwater such that concentrations will degrade sufficiently toward or below the Colorado Basic Groundwater Standards to allow site closure. The approach outlined in the work plan included groundwater delineation, groundwater remediation facilitated by injection of ORC®, followed by monitoring to demonstrate the effectiveness of the remediation. CDPHE approved the work plan on February 23, 2006, and implementation began on February 27, 2006. The installation of a downgradient monitoring well, baseline groundwater sampling, and ORC® injections were completed in mid-March 2006. Initial post-injection groundwater samples were collected in April. Follow-on groundwater samples are being collected on an approximately monthly basis until the State groundwater standard for benzene is attained. At that point, groundwater samples will be collected on a quarterly basis to demonstrate continued attainment of the groundwater standard for benzene and to support a petition for closure under the Consent Agreement. Data summaries from each groundwater sampling event are provided to the State within 30 days of sampling.

4. Water Supply Wells

CDPHE approved LAC's Work Plan for the abandonment of two former water supply wells at LAFB on February 14, 2006. The work plan was based on a variance from the Board of Examiners of Water Well Construction and Pump Installation Contractors, Colorado Division of Water Resources (DWR) received on October 21, 2005. LAC began the work in February 2006, and CDPHE issued an NFA letter on March 3, 2006.

5. PAA_2

On February 14, 2006, CDPHE approved a Letter Work Plan to investigate PAA_2, a possible disposal area identified in the RFA. It included collection, visual observation, and analysis of soils from eight borings. No debris was observed in the borings, nor were contaminants of

concern were detected in the samples above the regulatory limits. CDPHE issued an NFA on March 14, 2006.

6. Asbestos in Soils in the Northwest Neighborhood (NWN)

A Compliance Advisory was issued by CDPHE in April, 2003 to address asbestos in soils. Under the Compliance Advisory, several sampling work plans and a response plan were approved by CDPHE for investigation and remediation of the NWN including: *Soil Sampling Work Plan for Lots or Areas which have been Covered,* dated July 24, 2003; and *Final Response Plan*, dated August 15, 2003, including amendment dated September 12, 2003.

Under Lowry 2, LAC's scope included sampling and remediation of the remaining property within the NWN, that is subject to the Compliance Advisory but had not been sampled or remediated . This area consists of Filing 28, 670 North; Building 667. and portions of Filing 16 and Building 670.

CDPHE approved LAC's variance to the *Final Sampling Work Plan Where Construction is Complete and Bare Soils Exists, dated May 9, 2003*, in*cluding amendment dated August 18, 2003* on March 29, 2006 and sampling began on April 10, 2006. LAC completed sampling of the properties in August, 2006. LAC performed remediation of the properties on May 10, 2006 in accordance with the *Final Amended Response Plan* (September 12, 2003). LAC submitted Requests for Notice to Construct or No Further Action and Requests to Transfer for each of the properties and has received the following closures from CDPHE:

- 670 North – Notice to Construct and permission to transfer issued on August 17, 2006,
- Building 667 – No Further Action and permission to transfer issued on September 7, 2006, and
- Filing 28 (also known as "First 11 Lots") Notice to Construct and permission to transfer issued on October 4, 2006.

LAC submitted closure documentation for Filing 28 (including the Trenton Median and building 670 Sliver) on October 12, 2006, requesting NFAs for Trenton Median and Building 670 Sliver and a Notice to Construct and permission to transfer for Filing 28.

During redevelopment, LAC will provide construction oversight of NWN properties consistent with Section VII, the Soils Management Program and Exhibit 7, the Asbestos Soil Characterization and Management Plan. For properties with a Notice to Construct, after redevelopment is complete, the builders will clean residences in accordance with the Indoor Air Sampling Plan, pursuant to the Compliance Advisory, and then request NFA's for each lot.

7. Building 777

Building 777 was formerly used as a correctional facility workshop and more recently as an Area Dental Laboratory. The facility is currently part of the Logan School for Creative Learning and is located just south of East 11th Avenue and west of Yosemite Street. Concerns were raised during the RCRA Facility Assessment regarding beryllium dust associated with the finishing of dental bridges during this facility's use as one of the four Air Force-wide area dental laboratories.

On December 29, 2005, CDPHE requested additional information from LAC regarding the remodeling program, asbestos abatement, subsequent cleaning, and beryllium sampling performed by the Logan School. LAC submitted the required information, developed a workplan to for sampling of the building in accordance with CDPHE requirements, and performed cleaning of beryllium on the five (5) main structural beams in the building. Remediation was completed on September 14, 2006, and a re-entry authorization was received from CDPHE on September 18, 2006, which stated that the cleaning was successful and there were no long-term beryllium exposure risks in the building. Approval of the No Further Action request was approved by CDPHE on November 1, 2006.

C. PROPOSED INVESTIGATIONS

LAC scope includes additional investigation of the following areas to evaluate a final remedy, if necessary, and achieve regulatory closure. This section includes the RFA soil data gaps investigation and work related to the demolition of Building 898.

1. RFA Soil Data Gaps Investigations

As noted in earlier sections of this document, the Draft Final RFA was submitted to the CDPHE in January 2005. All Known and Unknown Conditions, as those terms are defined in the Cooperative Agreement, identified through the RFA will be addressed as part of this First Amendment. Groundwater unknowns identified in the RFA will be funded under Lowry 1. Although additional concerns may be identified, the following is a list of Known Conditions that warrant further investigation and potential remedial activities. A summary of each site is presented in Section II, and additional information can be found in the RFA and source documents (See Figure 1-1 for locations).

- **Buildings 546 and 568**

Buildings 546 and 568 were used as dental clinics, and are located in the Northwest Neighborhood. The RFA reported that mercury may have been used in the buildings but no documentation was available to indicate that drains and piping were cleaned prior to demolition. Soils from these locations was being observed during redevelopment activities.

LAC is in the process of drafting the documentation following redevelopment on both of these parcels on findings during construction.

- **Building 753**

Building 753 was constructed in 1943 and used as a dental clinic by both the Air Force and the CCCS. Due to the presence of low levels of mercury vapor in the building, the RFA recommends that the building be sampled and remediated for mercury or that restrictions be placed on the building to prevent a change in use.

- **Building 416 (1016)**

This facility is within the boundary of the IRP FTZ and was used for munitions maintenance and training. Two possible 1,000-gallon USTs were identified that were used to supply diesel/heating oil to the facility in 1944. LAC will conduct further investigation at this former building to address the potential presence and impact from the reported two 10,000-gallon USTs and the potential release from the UST removed in 1989.

- **Building 1496A**

This building was located adjacent to Building 1499 in the center of LAFB and was associated with training activities. This facility had multiple gasoline pump pits and a 5,000-gallon gasoline UST. No information is available regarding removal of this tank. LAC will conduct additional investigation for this facility to try to locate the UST.

- **Building 1499**

Building 1499, currently the Big Bear ice arena, is located in the center of LAFB and was used for training activities associated with the guided missile school and formerly housed the Nuclear Weapons Training School, beginning in the late 1950s. Additional investigation includes identifying more specific information on activities that occurred in Building 1499 and the potential disposal of solvents, such as TCE, to the groundwater and soil in the vicinity of the building.

- **Potential PCB Contamination**

Through the RFA, fifteen (15) existing facilities reportedly stored or used PCB-containing transformers during LAFB's operational history. These facilities include Buildings 349, 353A, 354, 359, 361, 383, 401, 811, 850, 901, 903, 905, 959, 999, and 1499. The buildings with 300 and 400 series numbers are located south of East 6th Avenue and west of Uinta Way. The buildings with 800 and 900 series numbers are located in the northeastern portion of LAFB and are part of the CCCS.

LAC will submit a workplan addressing these data gaps within sixty (60) days of the approval of the Final RFA by CDPHE. The workplan will include a review of existing data, and recommendations for sampling to achieve regulatory closure. Figure 4-1 illustrates the schedule of work and reporting following submittal of the workplan.

2. Building 898

Building 898, a former dental clinic, was investigated and mercury was found to be present in the drains and flooring materials. The building will be demolished by LAC. As part of the demolition, soil samples will be collected and analyzed for mercury, and the drainage system connecting to the first manhole will be investigated to determine if there are releases of mercury that require remediation.

LAC will submit a workplan for sampling and demolition. The work plan is planned for submission on January 15, 2007. The schedule for sampling and demolition of the building is illustrated in Figure 4-1.

D. OTHER CORRECTIVE MEASURES

As described in paragraph 18i of the Consent Agreement, LAC will also address any and all other contaminated media and/or debris identified on LAFB during Lowry 2 including but not limited to, groundwater contamination and asbestos in soil, as such issues are discovered by LAC, the LERA, or any other entity(ies). The only excluded matters are those that are Air Force Obligations as defined in the Cooperative Agreement as amended.

LAC will prepare Work Plans in accordance with the Consent Agreement. Those may include the following types of investigation:

Characterization Plan – This activity is intended to complete the site investigation process and will provide information needed to systematically characterize the nature and extent, both horizontal and vertical, and the risk associated with releases from LAFB;

Corrective Action Plans (CAP) – A detailed outline of a corrective action plan for the LAFB project is presented in the Consent Agreement. Upon direction of CDPHE, corrective action plans may be generated for different areas of LAFB, based on the site characteristics and timing of other activities;

Treatability Studies – If necessary or if required by CDPHE, LAC may conduct treatability studies in order to consider technologies that are of interest for quick and effective remediation of identified contamination. Treatability studies will be proposed and implemented to help determine the most effective and efficient technique to rapidly remediate those identified issues at LAFB; or

Interim Actions – Interim Actions may be proposed where there is some characterization of a site or where there has already been a removal action at a site, to assist with remedial efforts (both on-site and off-site), to prove the efficacy of large scale remedial efforts, and to help meet LERA development schedules.

For these projects,

- pursuant to paragraph 26 of the Consent Agreement, LAC will submit plans within thirty (30) days to CDPHE for review, and

- pursuant to paragraph 28, LAC will submit a revised work plan within forty-five (45) days of receipt of CDPHE comments

- Pursuant to paragraph 29, within fifteen (15) days of CDPHE approval, LAC will implement the plan, and

- pursuant to paragraph 30, LAC will submit a written report to the CDPHE within thirty (30) days of completing the implementation of the plans.

- If the CDPHE determines that the nature and extent of contamination has not been characterized adequately, LAC will submit within forty-five (45) days a revised work plan for additional characterization.

- Pursuant to paragraph 34, within forty-five (45) days of the CDPHE's determination that the contamination has been adequately characterized and that remediation is necessary, LAC will submit a CAP, if determined necessary by the CDPHE.

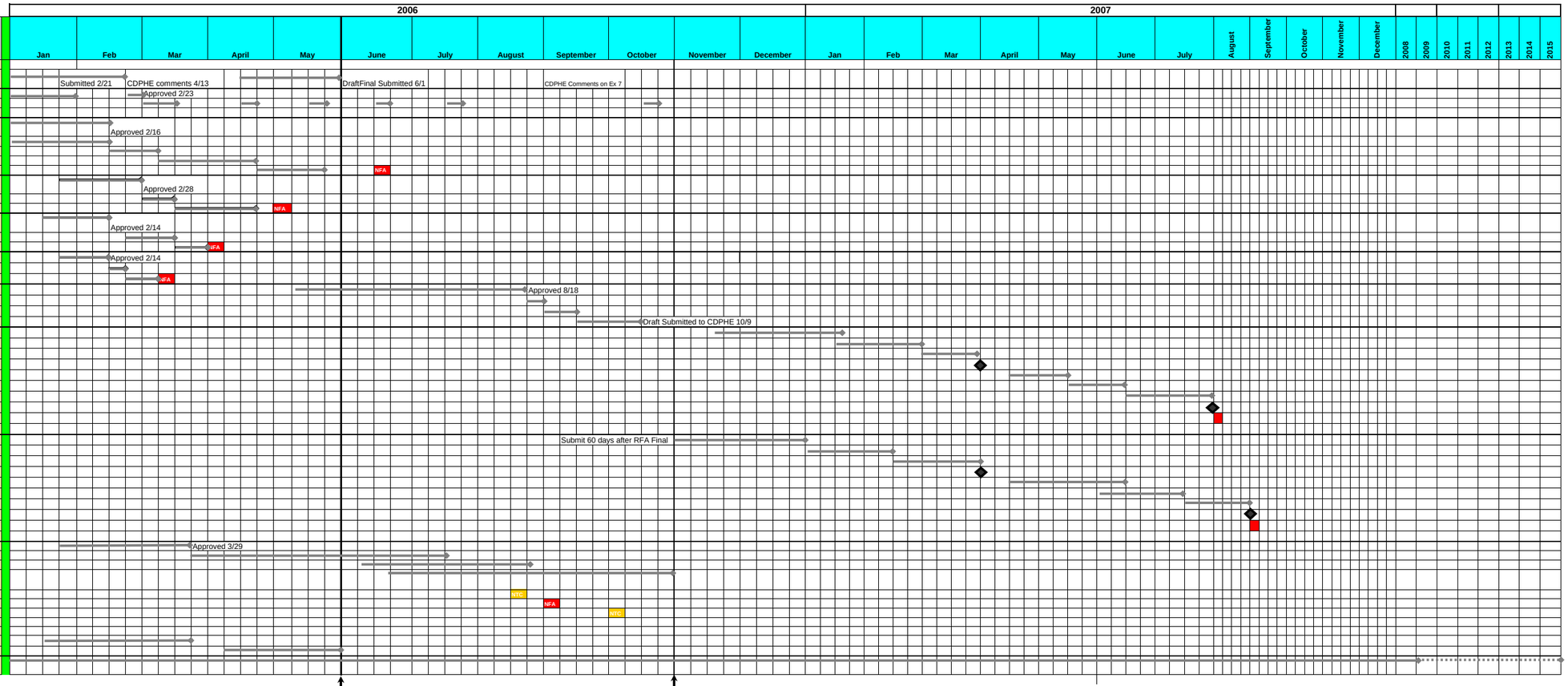
E. CLOSURE REPORTS/NO FURTHER ACTION REQUIRED

Within ninety (90) days of completion of corrective action measures required by the CDPHE, either through CAP or interim actions or other actions executed pursuant to the Consent Agreement, LAC shall submit Completion Reports to CDPHE. Completion Reports shall be submitted for each respective FOSET parcel(s) or issues that arise under paragraphs 18 through 18i of this Consent Agreement so that the CDPHE may make final closure determinations. CDPHE shall make its best efforts to either accept or reject the LAC's Completion Report within thirty (30) days of CDPHE receipt. If CDPHE approves the LAC's Completion Report, it shall send an approval letter to the LAC. If CDPHE disapproves the LAC's Completion Report, it shall include in its notice of disapproval, and a statement of the basis for its disapproval. LAC shall, within fifteen (15) days of receipt of CDPHE's disapproval, either 1) submit a notice of acceptance of the determination or 2) submit a notice of dispute to the determination. If LAC fails to submit either of the above notices within the specified time it will be deemed to have accepted CDPHE's determination.

Final Transition Plan II

Figure 4-1
Project Schedule

Project	Task
Environmental Management	Transition Plan (Including Soil Mgt. Plan)
Building 606	Work Plan
	Investigation/Field Work*
	Report*
Outdoor Firing Range	Munitions H&S Plan
	Work Plan
	Munitions Removal
	Site Remediation
	Closure Report
Fire Training Zone	Revised Work Plan
	Site Remediation
	Closure Report
Water Supply Wells	Work Plan
	Field Work
	Closure Report
Assessment	PAA2 Work Plan
	Field Work
	PAA2 Report
	777 Workplan
	Field Work
	Remediation
	777 Closure Report
Building 898	Work Plan
	Work Plan Review (CDPHE)
	Work Plan Revision
	Work Plan Approval (CDPHE)
	Investigation/Field Work
	Report Submittal
	Report Review (CDPHE)
	Report Approval
	NFA
Soil Data Gaps*	Work Plan*
	Work Plan Review (CDPHE)
	Work Plan Revision
	Work Plan Approval (CDPHE)
	Investigation/Field Work*
	Report Submittal
	Report Review (CDPHE)
	Report Approval
	NFA
NWN	Work Plan/Variance
	Investigation
	Site Remediation*
	NFA or Notice to Construct* (NTC) Submitted
	670 North
	Building 667
	Filing 28 First 10 Lots
	Filing 28 Remainder
Parcel T	Parcel T Abatement
	Parcel T Construction
Construction Oversight	Multiple Locations



NOTE: * The schedule for these projects is tentative and will be updated as the project proceeds

V. APPLICABLE STATE AND FEDERAL STANDARDS ASSOCIATED WITH REMEDIATION

Paragraph 23(a)(vii) of the Consent Agreement requires LAC to identify all applicable State and Federal standards associated with remediation of any contaminated media and/or debris at LAFB. The original Transition Plan identified remedial action objectives and applicable or appropriate and relevant (ARARs) for OU 5 - Groundwater and the OU 2 - Landfill Zone. This Section is provided to identify these standards for contamination associated with lead impacted soils within the OFR area; dioxin and PAH impacted soils within FTZ area; petroleum impacted soils within the footprint of the former Building 606; asbestos in soils within the NWN; potential mercury contaminated soil associated with Building 898; and, other potential contaminants in soil or debris at LAFB that would require remediation.

For OU1 - Fire Training Zone (FTZ) and the Outdoor Firing Range (OFR), remedial action objectives and applicable or appropriate and relevant (ARARs) associated with current cleanup of contaminated soil at these two former sites were established in Engineering Evaluation/Cost Analysis (EE/CA) and Action Memorandum documents for these sites and agreed upon by the regulatory agencies. This Section also identifies potential ARARs and to-be-considered (TBC) criteria for other potential sites where contaminated soil or debris would be required to be remediated. The remedial action alternatives being developed by LAC must attain applicable environmental standards required by CDPHE pursuant to the Consent Agreement. As part of the Soils Management Program in Section VII of this document, LAC has proposed soils action levels to be used at LAFB for unknown discoveries. Table 5-1, Lowry Soils Action Levels (LSAL), provides a list of those specific contaminants that either have been addressed at LAFB or could be potentially discovered during the course of the redevelopment of LAFB. LAC has reviewed and evaluated each of these respective action levels, and has proposed Lowry specific action levels for soil. These soil action levels may be modified based upon site specific information as described further in Section V.D. below.

A. INTRODUCTION

The Comprehensive Environmental Response and Liability Act (CERCLA) Section 121(d), as amended by the Superfund Amendments and Reauthorization Act (SARA), requires that, at a minimum, any remedial action achieve overall protection of human health and the environment and comply with ARARs. Laws and regulations identified as ARARs are either applicable or, alternatively, relevant and appropriate. Other criteria that do not meet the definition of an ARAR may also be used to develop remedial objectives and are known as TBCs.

Remedial or removal actions shall, to the extent practicable considering the exigencies of the situation, attain applicable or, alternatively, relevant and appropriate requirements under Federal environmental law, or any promulgated standards, ARARs, criteria, or limitations under a State environmental law that is more stringent than any federal standard, requirement, criterion, or limitation.

Remedial Action Objectives

Remedial action objectives are media-specific goals for protection of human health and the environment that must be identified prior to the development of remedial action alternatives. The process followed in developing remedial action objectives for site media typically consists of identification of chemicals of concern, identification of potentially applicable or relevant and appropriate Federal and State regulations and other guidance, identification of applicable site-specific risk-based criteria, and, finally, selection of the most appropriate or applicable regulatory values, guidance values, or risk-based values as preliminary remediation goals (PRGs). Generally, where a chemical-specific ARAR exists, it provides the basis for the corresponding PRG; if more than one chemical-specific ARAR exists, the most stringent is generally used. The selected PRGs provide the basis for the remedial action objectives. As described in more detail below, remedial action objectives have been determined for OU 1 – FTZ and the OFR.

ARARs

ARARs fall into three generally recognized categories: chemical-specific, location-specific, and action–specific. Chemical-specific ARARs identify acceptable limits for an amount or concentration of a chemical that may be present in the environment. These standards usually take the form of health or risk-based numerical limits that restrict concentrations of various chemical substances to a specified level.

Location-specific ARARs identify requirements that apply because a site has specific issues related to geography or the presence of a protected resource. Protection of a geographical or physical location of the site is emphasized, rather than the nature of the contaminants or the proposed remedial action. Location-specific ARARs may limit the removal action that may be implemented or create the need for more stringent remedial efforts. For LAFB, these consist of regulations applicable to wetlands, floodplains, and wildlife habitats.

Action-specific ARARs are those which are applicable to particular remedial actions, technologies, or process options. Action-specific ARARs do not, in themselves, determine the remedial action alternative; rather, they indicate how a selected alternative must be achieved.

ARARs consist of two sets of requirements: those that are applicable and those that are relevant and appropriate. Applicable requirements are those cleanup standards, standard of control, and other substantive requirements, criteria, or limitation promulgated under Federal or State law that specifically addresses a hazardous substance, pollutant, contaminant, removal action, or location at a CERCLA site. Relevant and appropriate requirements are similar requirements, which, while not directly applicable, clearly address problems or situation sufficiently similar to those encountered at a CERCLA site such that their use is well suited to the particular site.

Evaluating a remedial action alternative for compliance with ARARs involves determining whether chemical-specific, location-specific and action-specific ARARs are satisfied by implementation of the alternative.

To Be Considered Criteria

Although they are not considered ARARs, advisories, criteria, guidance, and policies, etc. are criteria "to be considered" (TBC). The TBCs are not ARARs because they are neither promulgated nor enforceable criteria, but may assist in defining and developing protective remedies. The TBC category consists of advisories, criteria, or guidance developed by EPA, other federal agencies, or state agencies that may be useful in setting cleanup levels and developing remedies.

B. OU 1 - FIRE TRAINING ZONE (FTZ) SOIL

The selected remediation for the FTZ soil is excavation and off-site disposal of polynuclear aromatic hydrocarbon (PAH) contaminated soil and excavation and off-site incineration of dioxin/furan-contaminated soil[1]. The ARARs and TBCs for addressing the soil at the FTZ, as described in the EE/CA and Action Memorandum, are identified in this section. The implemented alternative will comply with all chemical–specific, location-specific, and action-specific ARARs.

The remedial action objective for PAH-contaminated soil is 0.09 milligrams per kilogram (mg/kg) for benzo(a)pyrene and dibenz(a,h)anthracene. This objective is based on the 1996 Environmental Protection Agency (EPA) residential soil screening levels (SSLs) for both of these PAHs. Although the SSLs for the PAHs have recently been lowered, the 1996 EPA SSLs are consistent with current EPA Region 3 residential risk-based concentrations (RBCs), and the use of the 1996 SSLs on a sample-specific basis to identify removal areas is considered sufficiently protective of human health and the environment at the site.

The removal action objective for dioxin-contaminated soils is the current PRG for CERCLA and Resource Conservation and Recovery Act (RCRA) sites of 1 part per billion (ppb) toxicity equivalents (TEQ) (dioxins/furans) for residential use (EPA, 1998). Potential future reductions to EPA health-based criteria may occur when EPA's reassessment of dioxin (EPA, 2000) is completed and incorporated into revised guidance for selection of dioxin cleanup levels, because EPA has tentatively concluded that the carcinogenic and non-carcinogenic potency of dioxin may be somewhat greater than previously believed. However, previous soil sampling conducted at the site indicates that residual dioxin/furan concentrations in soil in the removal area would be one to four orders of magnitude lower than the EPA PRG of 1 ppb.

Attainment of these objectives will address cleanup of site soil to residential land-use standards.

[1] See *Final Fire Training Zone Engineering Evaluation/Cost Analysis, Lowry Air Force Base, Colorado* (Versar, 2003a), the *Final Investigation Report of Dioxin Sampling to Support the Fire Training Zone Feasibility Study, Lowy Air Force Base, Colorado* (Versar, 2002), the *Final Investigation Report of Sampling to Support the Fire Training Zone Feasibility Study, Lowry Air Force Base, Colorado* (Versar, 2001), the *Revised Draft Final Fire Training Zone Action Memorandum* (Versar, 2003b), and the February 2004 *Draft Final Work Plan for the Removal Action at the Fire Training Zone* (modified from Gomez-MTARRI Joint Venture and Parsons ES, February 2003)

OU 1 FTZ Soil - Chemical-Specific ARARs

Currently, there are no Federal or State chemical-specific ARARs for soil contaminants of concern at the FTZ. However, the remedial action objectives for the PAHs and dioxins/furans were based on chemical-specific TBCs.

OU 1 FTZ Soil - Location-Specific ARARs

Because the areas of the FTZ soil that is being remediated are not located within or adjacent to any wetlands, floodplains, or historically significant areas; and sensitive habitats, or threatened or endangered species are not present (Halliburton, 1994), location-specific ARARs are neither applicable nor relevant and appropriate for this site.

OU 1 FTZ Soil - Action-Specific ARARs

Table 5-2 presents action-specific ARARs for the FTZ identified in the EE/CA and Action Memorandum. Action-specific ARARs that may be applicable or relevant and appropriate to the FTZ soil remediation include the following:

- Health and safety standards promulgated by the Occupational Safety and Health Administration (OSHA)
- Waste management activities under RCRA
- Protection of surface water quality under the Clean Water Act (CWA)
- Protection of air quality under the Clean Air Act (CAA)
- Hazardous materials transportation requirements

Colorado-specific regulations, including those for hazardous waste, air quality, and water quality, are also identified in Table 5-2.

Upon excavation, CDPHE considers the dioxin/furan-contaminated soil, as indicated by visual evidence of combustion and concentrations above 1 ppb TEQ, to be a hazardous waste, because it was potentially derived from the combustion of trichloroethene (TCE), which is present at low concentrations in groundwater underlying portions of the FTZ. Therefore, the excavated soil is subject to Land Disposal Restrictions (LDRs). Land disposal of soil with a concentration of a dioxin or dioxin-like congener exceeding 1 ppb is prohibited for F-listed dioxin-bearing wastes under the current permit for the RCRA Subtitle C landfill in Colorado. In addition, the concentrations of some of the individual congeners exceed 10 times the Universal Treatment Standards (UTS) under the LDRs, as listed in 40 CFR Section 268.48. Although the soil is not considered an F-listed dioxin-bearing waste (40 CFR Section 261.31), which is prohibited from land disposal except under certain conditions (40 CFR Section 268.31), the Colorado Department of Public Health and the Environment (CDPHE) indicated a variance and a permit modification would be required to dispose of the soil, and recommended other options be pursued. Disposal of nonhazardous waste (i.e., PAH-contaminated soil and dioxin/furan-

contaminated soil that has been rendered nonhazardous) will need to comply with RCRA criteria for municipal solid waste landfills.

OU 1 FTZ Soil To-Be-Considered Category

As described above, the remedial action objective for the two PAHs of concern in the FTZ soil is based on the 1996 EPA residential SSLs. A chemical-specific TBC criterion for dioxins/furans in soil is the EPA PRG of 1 ppb TEQ for remedial sites for dioxin in surface soil involving a residential exposure scenario (EPA, 1998). EPA recommends that the 1 ppb TEQ concentration should be used as a starting point for residential soil cleanup levels or PRG, and a level between 5 to 20 ppb TEQ should be used as a starting point for cleanup levels or PRGs for commercial/industrial sites (EPA, 1998). These levels are recommended unless extenuating site-specific circumstances warrant different levels (EPA, 1998). The proposed reuse of the Fire Training Zone is residential and recreational; the removal action objectives for PAHs and dioxins/furans at the Fire Training Zone are based on the most conservative, residential scenario.

C. OUTDOOR FIRING RANGE (OFR) SOIL

The selected remediation for the OFR is surface and subsurface ordnance/explosives (OE) clearance, excavation, onsite soil stabilization, and offsite disposal at a solid waste landfill. The ARARs and TBCs for addressing the lead and bullet-contaminated soil at the OFR, as described in the EE/CA and Action Memorandum, are identified in this section. The implemented alternative will comply with all chemical–specific, location-specific, and action-specific ARARs.

The remedial action objective for lead-contaminated soil is 400 mg/kg, established by the CDPHE Proposed Soil Remediation Objectives Policy Document (CDPHE, 1997). The remedial action objective for bullet-impacted soil is to remove 99 percent of the metal fragments. Attainment of these objectives will address cleanup of site soil to residential land-use standards.

OFR Soil - Chemical-Specific ARARs

Currently, there are no federal or state chemical-specific ARARs for soil chemicals of concern at the OFR. A chemical-specific TBC for lead is identified below.

OFR Soil - Location-Specific ARARs

Because the areas of the OFR that are being remediated are not located within or adjacent to any wetlands, floodplains, or historically significant areas; and sensitive habitats, or threatened or endangered species are not present (Halliburton, 1994), location-specific ARARs are neither applicable nor relevant and appropriate for this site.

OFR Soil - Action-Specific ARARs

Table 5-3 presents potential action-specific ARARs for the OFR soil identified in the EE/CA and Action Memorandum. One action-specific TBC is described below. Action-specific ARARs

identified that may be applicable or relevant and appropriate to the OFR soil remediation include the following:

- Waste management activities under RCRA
- Protection of surface water quality under the CWA
- Protection of air quality under the CAA

Colorado-specific regulations, including those for hazardous waste, air quality, and water quality, are also identified in Table 5-3.

OFR Soil - To-Be-Considered Category

A chemical-specific TBC criterion for lead in soil is from the CDPHE Proposed Soil Remediation Objectives Policy Document (CDPHE, 1997). The Hazardous Materials and Waste Management Division of CDPHE has proposed a soil standards policy for making decisions involving the characterization and remediation of sites where regulated constituents of hazardous substances are present in soil. However, state soil standards have not yet been promulgated; therefore, these are TBC standards and not ARARs. The proposed soil cleanup standard for lead for residential/unrestricted land use is 400 mg/kg. This level is based on the Revised Interim Soil Lead Guidance for CERCLA Site and RCRA Corrective Action Facilities (OSWER Directive 9355.4-12; EPA, July 14, 1994) (EPA, 1994).

As indicated in Table 5-3, an action-specific TBC criterion is Department of Defense (DoD) Instruction 6055.9, which provides instruction to DoD components regarding explosives safety responsibilities.

D. OTHER SOIL AND DEBRIS SITES

ARARs have not been formally developed for other sites at former Lowry AFB with contaminated soil or debris that may or will need to be remediated. Therefore, this section identifies the most likely potential ARARs associated with remediation of potential contaminated media and/or debris at former Lowry AFB. Known remaining contaminants include petroleum-impacted soil at former Building 606, asbestos in soil within the Northwest Neighborhood, and potential mercury-contaminated soil associated with Building 898. Corrective actions at former Building 606 to address groundwater contamination derived from remaining petroleum-impacted soil are underway.

LAC has developed a list of soil action levels that are based on chemical-specific TBCs for soil contaminants, as included in Table 5-1 of this document. In 1997, CDPHE published the *Proposed Soil Remediation Objectives Policy Document* (SRO) wherein a system was proposed that allowed a party to choose from a variety of options for establishing soil remediation objectives at a site. Tier 2 of this policy document, Table Value Objectives, listed generic soil remediation objects that may be used at a site without having to collect excessive site-specific data or perform risk evaluations. Since that time, CPDHE has not finalized this document. In order to evaluate soil remediation action levels for LAFB, LAC put together Table 5-1, which compares CPDHE's SRO policy against various other soil action level policies including

Colorado Groundwater Standards; Colorado Department of Labor and Employment Oil Inspection Section Tier 1 Risk Based Screening Levels (RBSLs); USEPA Region IX Preliminary Remediation Goals (PRGs); and City and County of Denver Soil Screening Levels.

In some cases, risk-based criteria may also be developed and used on a site-specific basis in conjunction with the regulatory criteria to establish remedial criteria that are protective of human health and the environment. The risk-based criteria would be used to develop site-specific PRGs. These site-specific PRGs would then be used as a benchmark for use in the technology screening, alternative development and screening, and detailed evaluation of alternatives.

Other Soil and Debris Sites - Chemical-Specific ARARs

Currently, there are no Federal or State chemical-specific ARARs for soil at the former Lowry AFB, with the exception of those for Colorado regulated UST sites. In this exception, the chemical-specific Risk-Based Screening Levels (RBSLs) in the Colorado Department of Labor and Employment (CDLE) Division of Oil and Public Safety (OPS) regulations would be ARARs. Chemical-specific TBCs are identified in Table 5-1, Lowry Soils Action Levels, and the sources of these TBCs are further described below. Chemical-specific groundwater and surface water ARARs, including Federal and Colorado standards for groundwater and surface water quality, were identified in the original Transition Plan. As described below under action-specific ARARs, other chemical-specific standards may apply during implementation of remedial actions.

Other Soil and Debris Sites - Location-Specific ARARs

Location-specific ARARs place a restriction on the concentration of a compound in the environment, or the implementation of an activity, based on proximity to or the presence of a sensitive location. A location-specific ARAR may limit the type of remedial action that can be implemented or may require implementation of additional remedial actions. The two most common location-specific ARARs involve proximity to wetlands and floodplain areas.

For LAFB, location-specific ARARs consist of regulations applicable to wetlands, floodplains, and wildlife habitats. No other location-specific considerations (e.g., wild and scenic rivers, historical places, archaeological significance, endangered species), which would likely be impacted by remediation activities, were identified at LAFB. These regulations would be ARARs only if the location of the site or area to be remediated is within or adjacent to wetlands, floodplains, and wildlife habitats. No Colorado location-specific ARARs were identified. The following potential location-specific Federal and local ARARs are identified:

Local Standards (City and County of Denver and City of Aurora)

<u>Wetlands and Floodplains Standards and Regulations</u>

- Floodplain Use and Limitations (Denver Revised Municipal Code [DRMC], Chapter 56-203)

Federal Standards

<u>Wetlands and Floodplains Standards and Regulations</u>

- Statement on Procedures on Floodplain Management and Wetlands Protection (40 CFR 6 Appendix A, Executive Orders 11990 and 11988)
- Guidelines for Specification of Disposal Sites for Dredged or Fill Material (40 CFR 230-233)

Wildlife Habitat Protection Standards and Regulations

- Fish and Wildlife Conservation Act (16 USC 2901 et seq.)

Other Soil and Debris Sites - Action-Specific ARARs

Action-specific ARARs are those which are applicable to particular remedial actions, technologies, or process options. These regulations do not define site cleanup levels but do affect the implementation of specific types of remediation. Because the actions for most other soil and debris sites have not yet been defined, all of the potential action-specific ARARs listed in this section would not necessarily be included for each of the actions. Upon determination of the actions, LAC will evaluate these ARARs for remediation of other soil and debris sites. The most common action-specific ARARs are related to RCRA requirements, LDRs, and air emission issues. Action-specific ARARs that may be applicable or relevant and appropriate for remediation of other soil and debris sites address the following primary areas:

- Health and safety standards
- Waste management activities
- Protection of surface water quality
- Protection of air quality
- Hazardous materials transportation requirements

The following sections describe potential local, State, and Federal action-specific ARARs and TBCs.

Local Standards (City and County of Denver and City of Aurora)

General - Site Remediation

- Maximum Permissible Sound Levels (Aurora Municipal Code [AMC], Section 146-1964)
- Noise Control (DRMC, Chapters 36-3, 36-6, 36-8)
- Streets, Sidewalks, and Other Public Ways (DRMC, Chapters 49-267 et seq.)
- Zoning (DRMC, Chapter 57)

Discharge and Stormwater Runoff

- Utilities, addressing Sanitary Sewers, Wastewater, and Disposal of Waste (DRMC, Chapters 56-91, 56-102)

Air Emissions

- Air Pollution Control (DRMC, Chapters 4-10, 4-28)

Generation and Disposal of Remediation-Derived Wastes

- Fire Protection and Prevention (DRMC, Chapter 22)
- Solid Waste (DRMC, Chapters 48-41 et seq.)

In addition to the above listed local standards and guidelines, the City and County of Denver and the City of Aurora defer to the Uniform Fire Code as the basis for obtaining a permit for underground storage tank (UST) and aboveground storage tank (AST) installation and removal activities. Both cities also require building permits, obtained from the respective Building Departments, prior to construction activities.

Colorado Standards

General - Site Remediation

- Noise Abatement (25 CRS 12, Article 101 et seq.)
- Wildlife Act (33 CRS 1, Article 101 et seq.)

Discharge and Stormwater Runoff

- The Basic Standards and Methodologies for Surface Water (5 CCR 1002-31)
- Colorado Discharge Permit System (CDPS) Regulations (5 CCR 1002-61)
- Regulations for Effluent Limitations (5 CCR 1002-62)
- Pretreatment Regulations (5 CCR 1002-63)
- Regulation Controlling Discharges to Storm Sewers (5 CCR 1002-65)

Air Emissions

- Particulates, Smokes, Carbon Monoxide, and Sulfur Oxides (5 CCR 1001-3, Regulation No. 1)
- Odor Emission Regulations (5 CCR 1001-4, Regulation No. 2)
- Air Contaminant Emissions Notices (5 CCR 1001-5, Regulation No. 3)

Generation and Disposal of Remediation-Derived Wastes

- Solid Waste Disposal Sites and Facilities (6 CCR 1007-2)
- Hazardous Waste Regulations, including waste identification and manifest requirements (6 CCR 1007-3, Parts 261 and 262)
- Storage Tank Regulations (7 CCR Section 1101-14)

Federal Standards

General - Site Remediation

- National Contingency Plan (40 CFR 300, Subpart E)
- Migratory Bird Treaty Act (16 USC 701 *et seq*.)
- OSHA Worker Protection (29 CFR 1904, 1910, 1926)

Clean Water Act (33 USC 1251 et. seq.)

Discharge and Stormwater Runoff

- Clean Water Act Water Quality Criteria (Federal Ambient Water Quality Criteria [FAWQC] and Guidance Values [40 CFR 131.36]). The FAWQC are promulgated criteria and are enforceable limits. Note that the Federally-approved Colorado groundwater and surface water standards take precedence over the FAWQC.
- Federal Water Quality Criteria (FWQC) Summary. The FWQC may be relevant and appropriate for actions, which include discharges to surface water. The FWQC include guidance values issued by the USEPA Office of Science and Technology, Health and Ecological Criteria Division, 1994. Note that the Federally-approved Colorado groundwater and surface water standards take precedence over these non-promulgated guidance values. However, these guidance values should be considered if more stringent than the promulgated values, "where relevant and appropriate under the circumstances of the release or threatened release" (CERCLA Section 121[d][2][B]).
- National Pollution Discharge Elimination System (40 CFR 122, 125)
- Toxic Pollutant Effluent Standards (40 CFR 129)
- National Pollution Discharge Elimination System General and Categorical Pre-treatment Standards (40 CFR 403)

Clean Air Act (42 USC 7401 et. seq.)

Air Emissions

- National Primary and Secondary Ambient Air Quality Standards (40 CFR 50)
- Colorado Air Quality Implementation Plan (40 CFR 52, Subpart G)
- Standards of Performance for New Stationary Sources (40 CFR 60)
- National Emission Standards for Hazardous Air Pollutants (40 CFR 61)

RCRA (40 USC 6901-6987)

Generation and Disposal of Remediation-Derived Wastes

- Criteria for Municipal Solid Waste Landfills (40 CFR 258)
- RCRA regulations relating to the definition (identification), treatment, storage, transportation and disposal of hazardous wastes (40 CFR 260-268)
- RCRA regulations relating to USTs (40 CFR 280-282)

Hazardous Materials Transportation Act

Transportation of Hazardous Materials

- Transportation of hazardous material off base (49 CFR Parts 107, 171-180)

Other Soil and Debris Sites - To-Be-Considered Category

TBC criteria are not enforceable standards but may be technically or otherwise appropriate to consider in developing site or media-specific remedial action objectives or cleanup goals. Chemical-specific TBCs for soil contaminants, as included in Table 5-1 of this document, were used as the basis for developing a list of soil action levels for other soil sites. These TBCs include CDPHE Proposed Soil Remediation Objectives, CDLE OPS Tier 1 RBSLs, EPA Region 9 PRGs, and City and County of Denver Soil Screening Levels. However, as described above, if contaminated soil is associated with a regulated storage tank site, the CDLE OPS regulations would be ARARs.

A potential action-specific TBC is the Final Emission Control Plan for Construction Activities in the Northwest Neighborhood, pursuant to the CDPHE Compliance Advisory issued April 24, 2003.

Another potential action-specific TBC is criteria established by publicly owned treatment works (POTWs), such as pretreatment requirements or other acceptance criteria, for discharge of wastewater into public sewer systems (e.g., Pretreatment Requirements of Metro Wastewater Reclamation District).

TABLE 5-1
PROPOSED LOWRY SOILS ACTION LEVELS (LSAL)

CONTAMINANT	State of Colorado Residential Soil Cleanup Table Value June 2004 (mg/kg)	Residential Denver County	EPA Region 9 Preliminary Remediation Goals (PRGs) Residential (mg/kg)	OPS Tier 1 Risk Based Screening Levels (RBSLs) (mg/kg) Surficial soil/ res	Coal Storage Zone East Background Concentrations (mg/kg)	CDPHE Leachate Reference Concentration (mg/l)	CDPHE Groundwater Protection Level (mg/kg)	Lowry Action Level (mg/kg)
Arsenic	0.39	24	0.39		3.77	1.1		24**
Barium and compounds	5277	5277	5400		190	44		5277**
Cadmium and compounds	76.1	76.1	37		1.78	0.11		76.1**
Lead	400	400	400		33.7	1.1		400**
Mercury and compounds	82.4	1.1	23		0.0354	0.044		82.4**
Selenium	380	380	390		0.667	1.1		380**
Silver	380	380	390		NS	1.1		380**
Total Chromium	223 (CrVI)	223 (VI)	210 (total)		13.1	2.2 (CrIII)		223(CrVI)**
Polynuclear Aromatic Hydrocarbons (PAH)								
Acenaphthene	1000	1000*	3700	3600			1000	1000
Anthracene	1000	1000*	22000	18000			1000	1000
Benzo[a]anthracene	0.61	0.61	0.62	0.62			1000	0.61
Benzo[a]pyrene	0.06	0.06	0.062	0.062			1000	0.06
Benzo[b]fluoranthene	0.61	0.61	0.62	0.62			1000	0.61
Benzo[g,h,i]perylene	61	61					1000	61
Benzo[k]fluoranthene	6.09	6.09	6.2	6.2			1000	6.09
Chrysene	61	61	62	62			1000	61
Dibenz[a,h]anthracene	0.06	0.06	0.062	0.062			1000	0.06
Fluoranthene	1000	1000*	2300	2300			1000	1000
Fluorene	1000	1000*	2700	2400			1000	1000
Indeno[1,2,3-cd]pyrene	0.61	0.61	0.62	0.62			1000	0.61
Naphthalene	164	164	56	850			51.4	51.4
Pyrene	1000	1000*	2300	1800			1000	1000
Polychlorinated Biphenyls (PCB)								
PCB (Arochlor)-1016	0.22	0.22	3.9				1000	0.22
PCB-1221			0.22					0.22

TABLE 5-1
PROPOSED LOWRY SOILS ACTION LEVELS (LSAL)

CONTAMINANT	State of Colorado Residential Soil Cleanup Table Value June 2004 (mg/kg)	Residential Denver County	EPA Region 9 Preliminary Remediation Goals (PRGs) Residential (mg/kg)	OPS Tier 1 Risk Based Screening Levels (RBSLs) (mg/kg) Surficial soil/ res	Coal Storage Zone East Background Concentrations (mg/kg)	CDPHE Leachate Reference Concentration (mg/l)	CDPHE Groundwater Protection Level (mg/kg)	Lowry Action Level (mg/kg)
PCB-1232			0.22					0.22
PCB-1242			0.22					0.22
PCB-1248			0.22					0.22
PCB (Arochlor)-1254	0.22	0.22	0.22				1000	0.22
PCB (Arochlor)-1260	0.22	0.22	0.22				1000	0.22
Semivolatile Organic Compounds (SVOC)								
1,2-Dichlorobenzene	1000	1000*	600				56.9	56.9
1,3-Dichlorobenzene	55	55	530				38.4	38.4
1,4-Dichlorobenzene	20.3	20.3	3.4				7.76	7.76
2,4,5-Trichlorophenol	1000	1000*	6100				88	88
2,4,6-Trichlorophenol	44.2	44.2	6.1					44.2
2,4-Dichlorophenol	183	183	180				0.33	0.33
2,4-Dimethylphenol	1000	1000*	1200				2.7	2.7
2,4-Dinitrophenol	122	122	120					122
2,4-Dinitrotoluene	122	122	120				0.33	0.33
2,6-Dinitrotoluene	61	61	61				0.33	0.33
2-Chlorophenol	306	306	63					306
2-Methylphenol	1000	1000*	3100				5.9	5.9
2-Nitroaniline			180					180
3,3-Dichlorobenzidine	1.08	1.08	1.1					1.08
3-Nitroaniline			18					18
4-Chloroaniline			240					240
4-Methylphenol	306	306	310				0.27	0.27
4-Nitroaniline			23					23
Benzoic acid	1000	1000*	100000				111	111
Benzyl alcohol	1000	1000*	18000				96	96

TABLE 5-1
PROPOSED LOWRY SOILS ACTION LEVELS (LSAL)

CONTAMINANT	State of Colorado Residential Soil Cleanup Table Value June 2004 (mg/kg)	Residential Denver County	EPA Region 9 Preliminary Remediation Goals (PRGs) Residential (mg/kg)	OPS Tier 1 Risk Based Screening Levels (RBSLs) (mg/kg) Surficial soil/ res	Coal Storage Zone East Background Concentrations (mg/kg)	CDPHE Leachate Reference Concentration (mg/l)	CDPHE Groundwater Protection Level (mg/kg)	Lowry Action Level (mg/kg)
Bis(2-chloroethyl)ether			0.22					0.22
Bis(2-chloroisopropyl)ether	2.78	2.78	2.9				2.71	2.71
Bis(2-ethylhexyl)phthalate (DEHP)	34.7	34.7	35				1000	34.7
Butylbenzylphthalate	1000	1000*	12000				1000	1000
Diethyl phthalate	1000	1000*	49000				140	140
Dimethyl phthalate	1000	1000*	100000				760	760
Di-n-butylphthalate		1000*	NS					1000
Di-n-Octyl phthalate	1000	1000*	2400				1000	1000
Hexachlorobenzene	0.3	0.3	0.3				1000	0.3
Hexachlorobutadiene	6.23	6.23	6.2				1000	6.23
Hexachloroethane	34.7	34.7	35				1.08	1.08
Isophorone			510					510
Nitrobenzene	23.4	23.4	20					23.4
N-Nitroso di-n-propylamine	0.07	0.07	0.069				0.00000028	0.00000028
N-Nitrosodiphenylamine	99.1	99.1	99				0.67	0.67
Pentachlorophenol	2.98	2.98	3				0.045	0.045
Phenol	1000	1000*	18000				23.7	23.7
Petroleum Hydrocarbons								
TPH				500				500
Volatile Organic Compounds (VOC)								
1,1,1,2-Tetrachloroethane	3.03	3	3.2				0.033	0.033
1,1,1-Trichloroethane	1000	1000*	1200				62.5	62.5
1,1,2,2-Tetrachloroethane	0.51	1	0.41				0.0024	0.0024
1,1,2-Trichloroethane	0.95	0.95	0.73				0.036	0.036
1,1-Dichloroethane	1000	1000*	510				16.5	16.5
1,1-Dichloroethylene	0.07	0.07	120				12	12

TABLE 5-1
PROPOSED LOWRY SOILS ACTION LEVELS (LSAL)

CONTAMINANT	State of Colorado Residential Soil Cleanup Table Value June 2004 (mg/kg)	Residential Denver County	EPA Region 9 Preliminary Remediation Goals (PRGs) Residential (mg/kg)	OPS Tier 1 Risk Based Screening Levels (RBSLs) (mg/kg) Surficial soil/ res	Coal Storage Zone East Background Concentrations (mg/kg)	CDPHE Leachate Reference Concentration (mg/l)	CDPHE Groundwater Protection Level (mg/kg)	Lowry Action Level (mg/kg)
1,2,3-Trichloropropane	0.05	0.05	0.034				0.005	0.005
1,2,4-Trichlorobenzene	575	575	62				13.2	13.2
1,2,4-Trimethylbenzene	1000	1000*	52				70.6	70.6
1,2-Dibromo-3-chloropropane (DBCP)	0.35	0.35	0.46				0.002	0.002
1,2-Dibromoethane (EDB)	0.01		0.032					0.01
1,2-Dichloroethane (EDC)	0.37	0.37	0.28				0.0036	0.0036
1,2-Dichloroethylene (cis)	611		43				1.3	1.3
1,2-Dichloroethylene (trans)	1000		69				5.4	5.4
1,2-Dichloropropane	7.15	7.15	0.34				0.0087	0.0087
1,3,5-Trimethylbenzene	1000	1000*	21				111	111
1,3-Dichloropropane			100					100
2-Butanone (MEK)	1000	1000*	22000				18.3	18.3
Acetone	1000	1000*	14000				2.9	2.9
Benzene	0.84	0.84	0.64	2.8			0.17	0.17
Bromobenzene	1000	1000*	28					1000
Bromodichloromethane	7.84	7.84	0.82				0.007	0.007
Bromoform (tribromomethane)	61.6	61.6	62				0.048	0.048
Bromomethane (Methyl bromide)	9.31	9.31	3.9				0.156	0.156
Carbon tetrachloride	0.33	0.33	0.25				0.97	0.97
Chlorobenzene	127	127	150				5.33	5.33
Chloroethane	168	168	3				304	168
Chloroform	0.3	0.3	0.22				1.89	0.3
Chloromethane (methyl chloride)	0.87	0.87	47				1000	0.87
Cis-1,3-Dichloropropene	0.062	0.062 (non spec)	0.78				1000	0.062
Dibromochloromethane	5.79	5.79	1.1				0.004	0.004
Dichlorodifluoromethane	191	191	94				393	191

TABLE 5-1
PROPOSED LOWRY SOILS ACTION LEVELS (LSAL)

CONTAMINANT	State of Colorado Residential Soil Cleanup Table Value June 2004 (mg/kg)	Residential Denver County	EPA Region 9 Preliminary Remediation Goals (PRGs) Residential (mg/kg)	OPS Tier 1 Risk Based Screening Levels (RBSLs) (mg/kg) Surficial soil/ res	Coal Storage Zone East Background Concentrations (mg/kg)	CDPHE Leachate Reference Concentration (mg/l)	CDPHE Groundwater Protection Level (mg/kg)	Lowry Action Level (mg/kg)
Ethylbenzene	1000	1000*	400	200			104	104
m,p-Xylene[c]	1000 (total)	1000* (tot)	270	10000			1000 (total)	1000 (total)
Methyl isobutyl ketone (4-methyl-2-pentanone)	809	809	5300				3.3	3.3
Methyl tertbutyl ether (MTBE)			32					32
Methylene chloride	11.5	11.5	9.1				0.06	0.06
n-Butylbenzene	1000	1000*	240				238	238
n-Propylbenzene	611	611	240				148	148
o-Xylene[c]	1000 (total)	1000* (tot)	270	10000			1000 (total)	1000 (total)
sec-Butylbenzene	1000	1000*	220				229	229
Styrene	1000	1000*	1700				14	14
tert-Butylbenzene	1000	1000*	390				234	234
Tetrachloroethylene (PCE)	5.18	5.18	0.48				1.88	1.88
Toluene	1000	1000*	520	4000			85	85
Trans-1,3-Dichloropropene	0.062	0.062 (non spec)	0.78				1000	0.062
Trichloroethylene (TCE)	4.54	4.54	0.053				0.68	0.68
Trichlorofluoromethane	1000	1000*	390				1000	1000
Vinyl chloride	0.16	0.16	0.079				7	0.16

Notes:

NA = No regulatory standards or background data was available for constituent, therefore no site-specific screening value was assigned.

* CCoD - Max = 1% by weight for certain organic substances

**For any soil with high concentrations, a TCLP will be performed and the soil will be removed if it exceed the action level in "Leachate Reference Concentration".

TABLE 5-2

POTENTIAL ACTION-SPECIFIC ARARS AND TBCS
FIRE TRAINING ZONE SOIL REMEDIATION
FORMER LOWRY AIR FORCE BASE, DENVER AND AURORA, COLORADO

Standard, Requirement, Criterion, or Limitation	Citation	Description	Applicable/ Relevant and Appropriate [1]	Comments
Federal				
Resource Conservation and Recovery Act (RCRA) (40 USC 6901-6987)				
Identification and Listing of Hazardous Waste	40 CFR 261	Defines those solid wastes that are subject to regulation as hazardous wastes under 40 CFR Parts 262-265 and Parts 270, 271, and 124.	Yes	Requires all wastes to be characterized and defines the criteria for identifying hazardous wastes generated during removal action that may be contained in environmental media.
Standards Applicable to Generators of Hazardous Waste	40 CFR 262	Provides standards in 40 CFR Part 262 that address onsite accumulation of hazardous waste, cradle-to-grave tracking, labeling, and recordkeeping and reporting requirements	Yes	Applicable if hazardous waste is generated during excavation and removal activities
Land Disposal Restrictions	40 CFR 268.42 40 CFR 268.48	Treatment of waste subject to ban on land disposal must attain levels achievable by BDAT for each hazardous constituent in each listed waste or universal treatment standards, if residual is to be land disposed.	Yes	Potentially applicable for RCRA hazardous waste; may be relevant and appropriate for treatment and disposal of RCRA hazardous waste generated during excavation
	40 CFR 268 (Subpart D)	Movement of excavated material to new location and placement in or on land may trigger land disposal restrictions for the excavated waste	Yes	Potentially applicable if RCRA characteristics are met for excavated soil and other material, materials containing the waste are subject to landfill disposal restrictions, and material is placed in another disposal unit.
Standards Applicable to Transporters of Hazardous Waste	40 CFR Part 263	Standards applicable to transporters of RCRA hazardous waste require a manifest for off-site transport of hazardous waste	Yes	Applicable for transportation of hazardous material that is excavated and taken off base.
Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities	40 CFR 264.110	Area from which materials are excavated may require cleanup to levels established by closure requirements.	Yes	Potentially applicable for RCRA hazardous waste; may be relevant and appropriate for disposal and site closure after excavation of soil/waste and waste is similar to RCRA hazardous waste.
	40 CFR 264.270, 40 CFR 264.271, 40 CFR 264.273	Maximize degradation, transformation, or immobilization of hazardous constituents, minimize runoff, and maintain run-on/run-off control and management system.	Yes	Potentially applicable for RCRA hazardous waste; may be relevant and appropriate if CERCLA actions involve treatment and waste is similar to RCRA hazardous waste.
Criteria for Municipal Solid Waste Landfills	40 CFR 258	Standards establishing minimum national criteria for management of nonhazardous waste.	Yes	Potentially applicable for disposal of solid waste at a municipal solid waste landfill.

TABLE 5-2

POTENTIAL ACTION-SPECIFIC ARARS AND TBCS
FIRE TRAINING ZONE SOIL REMEDIATION
FORMER LOWRY AIR FORCE BASE, DENVER AND AURORA, COLORADO

Standard, Requirement, Criterion, or Limitation	Citation	Description	Applicable/ Relevant and Appropriate [1]	Comments
Hazardous Materials Transportation Act				
Transportation of Hazardous Materials	49 CFR Parts 107, 171-178	Provide standards for transportation of RCRA hazardous waste	Yes	Applicable for transportation of hazardous material that is excavated and taken off base.
Clean Air Act (CAA) (42 USC 7401 et. seq.)				
Air Programs	40 CFR 52 Subpart G	Gives approval of Colorado implementation plan.	Yes	Must meet Colorado air quality requirements.
Clean Water Act (CWA) (33 USC 1251 et. seq.)				
Water Quality Standards	40 CFR 122.44	Applicable federally approved state water-quality standards must be complied with under the CWA.	Yes	Not applicable for CERCLA remedial actions; may be relevant and appropriate for direct discharges to storm drains on site. This is not expected to occur.
Occupational Safety and Health Administration (OSHA)				
Occupation Safety and Health Standards - General Industry	29 CFR 1910	Cleanup operations involving hazardous substances at an uncontrolled hazardous waste site must comply with OSHA hazardous waste operations and emergency response health and safety standards.	Yes	Potentially applicable. Used to protect workers from exposure to health or safety hazards associated with hazardous waste operations.
Occupation Safety and Health Standards - Construction Industry	29 CFR 1926	Vehicle and heavy equipment operation and excavations must be in compliance with OSHA construction industry standards.	Yes	Potentially applicable. Used to protect workers from exposure to health or safety hazards associated with excavations and operating vehicles and heavy equipment.
State of Colorado				
Hazardous Waste Commission Regulations – 6 CCR 1007-3				
Waste Identification	Part 261	Provides criteria for the identification and listing of hazardous waste.	Yes	Requires all waste to be characterized and defines the criteria for identifying hazardous wastes generated during the removal action that may be contained in the environmental media.
Hazardous Waste Manifest Requirements	Part 262	Establishes standards for manifesting hazardous waste.	Yes	Applicable to remedial alternatives involving offsite landfilling of hazardous soil and debris. Not applicable to offsite landfilling of nonhazardous waste.
Air Quality Control Commission Regulations – 5 CCR 1001				
Regulation 1 – Particulates, Smokes, Carbon Monoxide, and Sulfur Oxides	5 CCR 1001-3 Section III.D	Requires use of all available and practical methods to minimize particulate emissions when clearing or leveling land.	Yes	Required if disturbing >5 acres in attainment area and >1 acre in nonattainment area (Denver has been redesignated to "attainment/maintenance" for PM_{10}). Used to achieve and maintain the ambient air quality standards for particulate matter.

TABLE 5-2

POTENTIAL ACTION-SPECIFIC ARARS AND TBCS
FIRE TRAINING ZONE SOIL REMEDIATION
FORMER LOWRY AIR FORCE BASE, DENVER AND AURORA, COLORADO

Notes:

1) An ARAR cannot be both "applicable" and "relevant and appropriate". If an ARAR is determined to be "applicable" the determination of "relevant and appropriate" is not needed since the "applicable" determination already makes that requirement of an environmental law an ARAR.

ARAR	=	Applicable or Relevant and Appropriate Requirement	CWA	=	Clean Water Act
AQCC	=	Air Quality Control Commission	CFR	=	Code of Federal Regulations
BDAT	=	best demonstrated available technology	DoD	=	United States Department of Defense
CAA	=	Clean Air Act	OSHA	=	Occupational Safety and Health Administration
CCR	=	Colorado Code of Regulations	PM	=	Particulate Matter
CRS	=	Colorado Revised Statute	RCRA	=	Resource Conservation and Recovery Act
CERCLA	=	Comprehensive Environmental Response, Compensation, and Liability Act	USC	=	United States Code

TABLE 5-3

POTENTIAL ACTION-SPECIFIC ARARS AND TBCS
OUTDOOR FIRING RANGE SOIL REMEDIATION
FORMER LOWRY AIR FORCE BASE, DENVER, COLORADO

Standard, Requirement, Criterion, or Limitation	Citation	Description	Applicable/ Relevant and Appropriate [1]	Comments
Federal				
Resource Conservation and Recovery Act (RCRA) (40 USC 6901-6987)				
Identification and Listing of Hazardous Waste	40 CFR 261	Defines those solid wastes that are subject to regulation as hazardous wastes under 40 CFR Parts 262-265 and Parts 270, 271, and 124.	Yes	Requires all wastes to be characterized and defines the criteria for identifying hazardous wastes generated during removal action that may be contained in environmental media.
Standards Applicable to Generators of Hazardous Waste	40 CFR 262	Provides standards in 40 CFR Part 262 that address onsite accumulation of hazardous waste, cradle-to-grave tracking, labeling, and recordkeeping and reporting requirements	Yes	Applicable if hazardous waste is generated during excavation and removal activities.
Clean Air Act (CAA) (42 USC 7401 et. seq.)				
Air Programs	40 CFR 52 Subpart G	Gives approval of Colorado implementation plan.	Yes	Must meet Colorado air quality requirements
Clean Water Act (CWA) (33 USC 1251 et. seq.)				
Stormwater Construction General Permit	40 CFR 122.26	Requires construction activities to follow requirements of construction general permit if >1 acre will be disturbed.	Yes	Requires Storm Water Pollution Prevention Plan with Best Management Practices be written and followed.
DoD Instructions				
DoD Instruction 6055.9 provides instruction to DoD components regarding explosives safety responsibilities	DoD 6055.9-STD	The implementing standard, DoD 6055.9-STD, addresses DoD ammunition and explosives safety standards. Chapter 12 of DoD 6055.9-STD provides standards for real property contaminated with ammunition, explosives, or chemical agents under any CERCLA cleanup effort. Standards include 1) implementing means to protect public from exposure to hazards from contaminated real property currently or formerly under DoD ownership or control; 2) permanent contamination of real property by explosives is prohibited; 3) real property contaminated with ammunition or explosives must be decontaminated using the most appropriate technology to ensure protection of the public consistent with the proposed end use of the property.	TBC[2]	For CERCLA cleanup purposes, these standards are not promulgated regulations and are not considered a "requirement" as defined in the NCP. However, they address problems or situations similar to those encountered at this site, and are, therefore, "to be considered."

TABLE 5-3

POTENTIAL ACTION-SPECIFIC ARARS AND TBCS
OUTDOOR FIRING RANGE SOIL REMEDIATION
FORMER LOWRY AIR FORCE BASE, DENVER, COLORADO

Standard, Requirement, Criterion, or Limitation	Citation	Description	Applicable/ Relevant and Appropriate [1]	Comments
State of Colorado				
Hazardous Waste – 6 CCR 1007(3)				
Waste Identification	Part 261	Provides criteria for the identification and listing of hazardous waste.	Yes	Requires all waste to be characterized and defines the criteria for identifying hazardous wastes generated during the removal action that may be contained in the environmental media.
Hazardous Waste Manifest Requirements	Part 262	Establishes standards for manifesting hazardous waste.	Yes	Applicable to remedial alternatives involving offsite landfilling of hazardous soil and debris. Not applicable to offsite landfilling of nonhazardous waste.
Waste Treatment	Part 100 Section 100.21(d)(1)	Requires treatment of hazardous waste be performed in a container.	Yes	If treatment is performed in a container then site has permit by rule and does not need to apply for a permit if conditions listed are met – must file notification and waste analysis plan 30 days prior to treatment
Air Quality Control Program – CRS 25-7-101 through 105				
Regulation 1 – Particulates, Smokes, Carbon Monoxide, and Sulfur Oxides	5 CCR 1001-3 Section III.D	Requires use of all available and practical methods to minimize particulate emissions when clearing or leveling land.	Yes	Required if disturbing >5 acres in attainment area and >1 acre in nonattainment area (Denver has been redesignated to "attainment/maintenance" for PM_{10})
Water Quality Control Act – CRS 25-8-501 through 505				
Regulation 61 – Colorado Discharge Permit System	5 CCR 1002-61	Requires permit if working on hazardous waste treatment site.	Yes	Will require Stormwater Pollution Prevention Plan with Best Management Practices.

Notes:

1) An ARAR cannot be both "applicable" and "relevant and appropriate". If an ARAR is determined to be "applicable" the determination of "relevant and appropriate" is not needed since the "applicable" determination already makes that requirement of an environmental law an ARAR.
2) TBCs are non-promulgated advisories or guidance issued by Federal or State government that are not legally binding and do not have the status of potential ARARs. TBCs will be considered and may be used to protect human health and the environment. TBCs are not ARARs, and thus are not subject to the "applicable" and "relevant and appropriate" determination.

ARAR	=	Applicable or Relevant and Appropriate Requirement	CWA	=	Clean Water Act
CAA	=	Clean Air Act	CFR	=	Code of Federal Regulations
CCR	=	Colorado Code of Regulations	DoD	=	United States Department of Defense
CCRS	=	Colorado Revised Statute	PM	=	Particulate Matter
CERCLA	=	Comprehensive Environmental Response, Compensation, and Liability Act	RCRA	=	Resource Conservation and Recovery Act
			USC	=	United States Code

VI. IDENTIFICATION OF INSTITUTIONAL CONTROLS

The LERA has received deed to almost all of the remaining property associated with LAFB. The following conditions, restrictions, and notifications were placed in the respective deeds and covenants to ensure protection of human health and the environment and to preclude any interference with ongoing or completed remediation activities at LAFB.

A. CONVEYANCE PROCESS AND DEED NOTICES

The Air Force conveyed approximately 700 acres through four deeds, pursuant to the Air Force's authority in accordance with CERCLA Section 120. CERCLA Section 120(h) requires the Federal government on all deeds related to real property transactions provide a covenant warranting that:

- All remedial action necessary to protect human health and the environment with respect to any such substance remaining on the property has been taken before the date of such transfer; and

- Any additional remedial action found to be necessary after the date of such transfer shall be conducted by the United States.

Transfers pursuant to CERCLA Section 120(h)(3)(C) entitled "Deferral" are commonly referred to as "Early Transfers." Section 120(h)(3)(C) allows the Governor of the State, in the case of a facility not listed on the USEPA National Priorities List, to defer the requirement that the United States provide a covenant in the deed conveying the property. The period between the transfer of title and the making of this final warranty is known as the "deferral period." The Air Force conveyed to the LERA property which met both of these requirements under a Finding of Suitability of Transfer (FOST) or a Finding of Suitability for Early Transfer (FOSET).

Here, the Air Force conveyed this property to the LERA under two different federal property disposal criteria, each with its own respective FOST or FOSET, as appropriate. The four deeds are titled as follows:

1. EDC FOSET Deed
2. EDC FOST Deed
3. Negotiated Sale FOSET Deed
4, Negotiated Sale FOST Deed

Each of the deeds included the following notice provisions:

1. Notice of the Presence of Asbestos and Allocation of Risk for Asbestos in or on Soil.

   (a) Asbestos-Containing Materials (ACM). The Grantee is advised that ACM has been discovered on portions of the Property. ACM was and still is incorporated into improvements, such as buildings, equipment, and pipelines, both above and below the ground, on the Property. In addition, ACM debris has come to be located on portions of

the Property. The Grantee covenants and agrees that in its use and occupancy of the Property, it will comply with all applicable Federal, State, and local laws relating to asbestos. The Grantee is cautioned to use due care during property development activities or other land uses that may result in contact with ACM.

(b) Allocation of Risk for ACM Conditions in or on Soil on the Property. The Grantee acknowledges that Grantee has agreed, by contract in the First Amendment to Cooperative Agreement for Environmental Services (Environmental Services Cooperative Agreement), to assume responsibility for ensuring protection of human health and the environment from any ACM conditions in or on soil on the Property for a period of ten (10) years or prior thereto, all as specified in the Environmental Services Cooperative Agreement. This responsibility includes, but is not limited to, undertaking any investigation and remediation necessary to protect human health and the environment. The Environmental Services Cooperative Agreement is available for public review at the Lowry Air Force Base Administrative Record located at the Government Publications Department, 4th Floor, Denver Public Library, Main Branch, 10 W. 14th Avenue, Denver, Colorado 80204.

(c) Disclosure in Subsequent Property Transfer Documents. The Grantee covenants and agrees to include the notice and disclosures contained in the Deed regarding ACM in any deed or lease the Grantee executes to transfer any portion of the Property.

2. Lead-Based Paint and Lead-Based Paint-Containing Material and Debris (collectively LBP).

(a) The Grantee covenants and agrees that in its use and occupancy of the Property, it will comply with Title X and all applicable Federal, State, and local laws relating to LBP. The Grantee acknowledges that the Grantor assumes no liability for damages for personal injury, illness, disability, or death to the Grantee, or to any other person, including members of the general public, arising from or incident to the purchase, transportation, removal, handling, use, disposition, or other activity causing or leading to contact of any kind whatsoever with LBP on the Property, whether the Grantee has properly warned, or failed to properly warn, the persons injured.

(b) Lead-based paint was commonly used prior to 1978 and may be located on the Property. The Grantee is advised to exercise caution during any use of the Property that may result in exposure to LBP. The Grantee covenants and agrees that in its use and occupancy of the property the Grantee is solely responsible for managing LBP, including LBP in soil, in accordance with all applicable Federal, State, and local laws and regulations. The Grantee acknowledges that the Grantor assumes no liability for property damages or damages for personal injury, illness, disability, or death to the Grantee or to any other person, including members of the general public, arising from or incident to the purchase, transportation, removal, handling, use, contact, disposition, or other activity involving LBP on the Property, whether the Grantee has properly warned, or failed to properly warn, the persons injured. The Grantee further agrees to notify the Grantor promptly of any discovery of LBP in soil that appears to be the result of Grantor activities and that is found at concentrations that may require remediation. The Grantor hereby reserves the right, in its sole discretion, to undertake an investigation and conduct any remedial action that it determines is necessary.

3. Pesticides.

The Grantee is notified that the Property may contain the presence of pesticides that have been applied above and below the ground and at current and former structures such as buildings and facilities. The United States knows of no misapplication of such pesticides, and believes that all applications were made in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)(7 U.S.C. 136-136y), its implementing regulations, and according to the instructions provided with such substances. Furthermore, that in accordance with CERCLA, the use of such substances is not a "release" (as defined in CERCLA, 42 U.S.C. 9601 (22)), but instead the use of a consumer product in consumer use (42 U.S.C. 9601(9)), and the application of a pesticide product registered under FIFRA for which recovery for response costs is not allowed (42 U.S.C. 9607(i)).

4. Endangered Species.

There have been endangered, threatened, candidate, and rare species of animals and plants identified in the vicinity of the Property. The Grantee acknowledges the requirements of the Federal Endangered Species Act of 1973 as amended and its state law counterparts with respect to the following:

(1). Mammals: black-footed ferret, swift fox, Preble's meadow jumping mouse;
(2). Birds: bald eagle, white-faced ibis, Baird's sparrow, mountain plover, black tern; and loggerhead shrike;
(3). Fish: plains top minnow;
(4). Insect: regal fritillary butterfly;
(5). Plants: Ute ladies'-tresses orchid, Colorado butterfly weed, showy prairie gentian

5. Wetlands.

The Property contains wetlands protected under Federal and State laws and regulations that, among other things, restrict activities that involve the discharge of fill materials into wetlands, including, without limitation, the placement of fill materials; the building of any structure; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and dams and dikes. The Grantee covenants and agrees that in its use of the Property, it will comply with all Federal, State, and local laws minimizing the destruction, loss, or degradation of wetlands.

6. Floodplains.

Certain areas on the Property are located within a 100-year flood plain. The Grantee covenants to comply with any applicable laws and regulations relating to construction activities within the flood plain. Executive Order 11988 states Federal agency responsibilities for managing flood plains, including the strict control of construction located within the flood plains.

B. CONSENT AGREEMENT

The LERA and LAC have entered a Consent Agreement Number 01-08-07-02 and amendments, with CDPHE (Consent Agreement). This Consent Agreement addresses the

remaining basewide environmental contamination issues associated with historical Air Force activities at LAFB. One of the requirements of this Agreement is the submission of Transition Plan II and the implementation of a Soils Management Program. The Soils Management Program will put in place a process and implement statutory requirements to guard against the likelihood of encountering environmental conditions during construction, installation and maintenance of utilities, and other intrusive activities that may lead to the discovery of environmental conditions. The Soils Management Program will be in place for the duration of the obligations of LAC under the Consent Agreement.

Consistent with the Soils Management Program, interim restrictions will be placed upon the following parcels prior to and during remediation activities as identified in Figure 3 to the Consent Agreement:

i. Parcel No.1 - the Northwest Neighborhood;
ii. Parcel No.4 - the Outdoor Firing Range;
iii. Parcel No.6 - Building 606; and,
iv. Parcel No.7 - Building 898.

In addition under Paragraph 101 of the Consent Agreement, the LERA shall not transfer any of the parcels identified in Exhibit F and Figure 3 of the Consent Agreement, or any part thereof, until (1) the Completion Report for the last identified remedial action for any such parcel, excluding any ongoing or future remedial actions associated with OU5, has been approved in writing by the CDPHE in accordance with Paragraph 50 hereof and all identified institutional controls have been implemented, if required or (2) if such measures have not been fully completed, written approval is obtained from the CDPHE.

C. STATE ENVIRONMENTAL COVENANT, C.R.S. §§ 25-15-321-327

Pursuant to the Enforceable Agreement between the Air Force and the CDPHE, the Air Force granted environmental covenants for OU2 and OU5. Pursuant to CRS section 25-15-320(2), an environmental covenant “shall be required for any environmental remediation project in which the relevant regulatory authority makes a remedial decision on or after July 1, 2001, that would result in either or both of the following: (a) Residual contamination at levels that have been determined to be safe for one or more specific uses, but not all uses; or (b) Incorporation of an engineered feature or structure that requires monitoring, maintenance, or operation or that will not function as intended if it is disturbed.”

The use restrictions associated with OU2, the Landfill Zone, included as Exhibit 2 are as follows:

a. Unless the covenant is modified in accordance with the State’s statute and regulations, OU2 will only be used as open space/ non-irrigated park following closure.
b. In general, the OWNER shall not use or conduct any activity on OU2 that will adversely affect:
    i. the integrity of the cover
    ii. the effectiveness of drainage or erosion controls
    iii. slope stability, or
    iv. groundwater or gas monitoring or control systems.

Specifically, no activity shall be conducted or permitted by the OWNER, nor shall the OWNER use OU2 in any manner that is inconsistent with the use designated in the preceding paragraph or that is not in compliance with the requirements of section 3.6.1(A) of 6 CCR 1007-2 or the Final Closure Plan for the Operable Unit 2 (OU2) Landfill Closure at Lowry, issued for review August 29, 2003.

c. The OWNER shall not extract or utilize in any manner whatsoever any water from the upper aquifer below the surface of the ground within OU2 for any purpose whatsoever, unless the OWNER shall first have obtained the prior written approval of the CDPHE.

For the duration of this covenant, the Air Force shall perform all of the requirements set forth in sections 3 and 4 of the Post-Closure Operation and Maintenance Plan, Appendix E of the Final Closure Plan for the Operable Unit 2 (OU2) Landfill Closure at Lowry, issued for review August 29, 2003.

The use restrictions associated with OU5, included in Exhibit 1, are as follows:

a. The OWNER shall not excavate into, extract or utilize, in any manner whatsoever any water from the alluvial aquifer and weathered Denver aquifer below the surfaces of the ground within the boundary of OU5 for any purpose whatsoever unless the OWNER shall first have obtained the prior written approval of the CDPHE.

b. The OWNER shall not tamper with or damage in any manner any of the monitoring wells.

c. If groundwater is encountered during any excavation of soil at the OU5, the OWNER shall notify the CDPHE within two (2) business days of the incident, and must dispose of the groundwater in accordance with applicable Federal, State, and local law and regulation, at its own cost and expense.

d. There is a series of monitoring wells on OU5. The OWNER shall notify the CDPHE within forty-eight (48) hours of any damage to these wells of which it has knowledge. Unless otherwise agreed to by the CDPHE, the OWNER, shall repair any damage to such wells or replace such wells at the OWNER's sole expense within ten (10) days.

e. Unless a written determination is obtained from the CDPHE that such systems are not required, the OWNER shall, at its sole expense, install and arrange for maintenance of the following ventilation systems in structures constructed on OU5 after the date of this Covenant, unless deemed and verified unnecessary in writing by the CDPHE.

    1. Newly-constructed residential structures must contain a sub-slab depressurization system (SSDS).

    2. Newly-constructed commercial structures must contain either a SSDS or a heating, ventilating, and air conditioning system (HVAC) which, while operating, is designed to provide an internal positive pressure in the building, and such HVAC must be

operated in accordance with normal and customary operating procedures for similar buildings in Denver, Colorado and Denver City Ordinance or a SSDS.

The term “structures” as utilized herein shall not include garages or other outbuildings used primarily for storage, built slab on grade, where no soil excavation five (5) feet or more below the ground surface is necessary for the construction or operation thereof.

In addition, the LERA provided CDPHE with Environmental Covenants placed upon the parcel affected by former FTZ. The remedial decisions regarding FTZ are in the process of being implemented by LAC in conjunction with the Consent Agreement. The restrictions on the FTZ are as follows:

1. The OWNER will not change the current use of the Property without the provision of notice to and the prior written approval of CDPHE.

2. The OWNER shall delineate the Property by use of appropriate fencing and signage, as approved by the CDPHE that will prohibit unauthorized entry.

3. The OWNER shall allow access to LAC to complete the remediation of the Property.

4. The OWNER shall not directly interfere or take any actions that could indirectly interfere with remediation of the Property.

5. The OWNER shall not conduct or permit any others to conduct any subsurface excavating, digging, drilling, or other disturbance of the Property without the provision of notice to and the prior written approval of CDPHE.

6. The OWNER shall not deposit or permit any solid or hazardous waste in or upon the Property and shall immediately notify CDPHE if any solid or hazardous waste is deposited in or upon the Property.

7. The OWNER shall execute any environmental covenants required by CDPHE after completion of the remediation of the Property.

VII. SOILS MANAGEMENT PROGRAM

This Soils Management Program (SMP) is being submitted in accordance with Paragraph 23a.ix of the Consent Agreement. This SMP will be implemented as a precaution to address unknown conditions encountered during soil disturbing activities, including but not limited to excavation, construction, installation and maintenance of utilities, and other intrusive activities that may lead to the discovery of environmental conditions that require characterization, investigation or remedial actions at the LAFB. LAC has drafted a site-specific Health and Safety Plan for field operations, performed under this program by LAC employees.

The SMP is organized as follows:

- Section A provides a brief background of the environmental issues at LAFB, and explains the need for a soils management program.
- Section B identifies the various parties and stakeholders and responsibilities of these parties as defined under the Consent Agreement.
- Section C addresses identification of potential contaminants of concern associated with historic activities at LAFB.
- Section D addresses protocols for construction/maintenance projects that involve the disturbance of soil, including construction oversight activities, reporting of suspect soil, and annual training sessions for workers.
- Section E addresses protocols for suspect contaminated soil, including the process for investigation, soil sampling and characterization, methodology and frequency, excavation and removal requirements, cleanup levels, and disposal procedures for soils that contain hazardous materials or solid waste.
- Section F addresses requirements that need to be fulfilled in order to achieve closure and/or notice of completion.
- Section G addresses LAC's program for annual training on the SMP.

The SMP is to be used as 1) a project planning tool for future soil excavation activities throughout LAFB as defined in the Consent Agreement; 2) as a communication tool to assure that the CDPHE, the USEPA, and other stakeholders understand the approach and timing of LAC's planned activities; 3) a tool to generate discussion so that LAC understands the needs and requirements of CDPHE, USEPA, and other stakeholders; and 4) to provide a framework to achieve the goals of the Consent Agreement including "seeking ways to accelerate corrective actions and eliminate unnecessary tasks and reviews by facilitating a close working relationship between all parties."

The SMP is not intended to provide detailed information on any subject, but is intended to identify and provide guidance on addressing potential unknown soil contamination that may be encountered during soil disturbance activities. Each of the activities that may be performed in conjunction with this Program may be expanded and detailed in a series of Work Plans or other interim actions as directed by CDPHE, and prepared in accordance with the Consent Agreement.

A. BACKGROUND

Numerous basewide assessments/investigations have been performed or are ongoing for the LAFB, including those presented below. This section provides a summary of investigations and remedial actions and a brief overview of the current LAFB soils management program, including the implementation of the Lowry Asbestos in Soils Decision Tree (Lowry Decision Tree).

1. Status of Investigations and Remedial Actions at LAFB

The most detailed explanation of the status of investigation and remediation activities at LAFB is presented in the RFA, performed by the Air Force, and submitted to CDPHE in January 2005. Table 3-6 from the RFA provides a list of the investigations performed to date. Response actions have been completed at many environmental sites at the LAFB as described in the RFA. These actions include closure of the former base landfill, removal of soil containing petroleum products, PCBs or PAHs, and closure of numerous storage tanks.

Other sites have undergone investigation and are currently in the response action or remediation and cleanup phases, meaning that regulatory site closure has not yet been achieved. Current response actions planned or underway include: OU5 groundwater investigation and remediation; the FTZ soil remediation; the OFR soil and MEC remediation; closure of OU2 located in the south-central portion of the LAFB (awaiting approval of closure documents); groundwater remediation and monitoring at Building 606; investigation and potential remediation of mercury in soil at Building 898; abandonment of former water supply wells at former Buildings 950 and 1435; and additional asbestos investigation and removal actions associated with the LAFB NWN. In addition, the RFA recommended several buildings or categories of buildings for further investigation, which are incorporated in the Consent Agreement for additional investigations and potential corrective actions.

2. LAFB Current Soils Management

In October 1997, the Air Force and the LERA implemented the “Revised Final Waste Management Plan for Lowry Infrastructure Projects” (WMP) prepared by Parsons Engineering Science, Inc. The current WMP applies only to the LERA and its subcontractors. The WMP established practices to be followed for handling contaminated materials that may be encountered during all construction activities conducted by the LERA.

Since the implementation of the WMP, the LERA has been successful in developing over 70% of the former base in conjunction with the Air Force’s environmental cleanup projects; and approximately 700 acres will be developed under the privatized environmental program. Portions of this property were contaminated by historical Air Force activity.

In addition to the WMP, the LERA has implemented the Lowry Decision Tree with regard to unknown discoveries of asbestos in soil. This Decision Tree is provided as Exhibit 6.

B. ROLE AND RESPONSIBILITIES OF THE PARTIES

Close coordination among the parties and stakeholders is necessary to ensure that soil disturbance activities are compatible with the remediation activities. Without proper coordination, workers and the general public could be exposed to contaminants; projects could be easily delayed by environmental problems; and cost overruns could occur. Proper coordination will ensure that soils are excavated, stored and/or disposed in accordance with the SMP and the Consent Agreement.

The roles and responsibilities of the various entities as they are related to soil disturbance activities are outlined below:

LAC – fulfillment of requirements of Consent Agreement, provide construction oversight to all excavations (including infrastructure); address discoveries with an expeditious, predictable process for characterization, investigation and remedial activities.

LERA – coordinate with LAC on redevelopment activities.

CDPHE – lead regulatory agency.

Other Stakeholders (Air Force, City and County of Denver, USEPA, City of Aurora) – review of documents; coordination of oversight activities.

C. IDENTIFICATION OF POTENTIAL CONTAMINANTS OF CONCERN

LAFB operated from 1937 to 1994 as an Air Force technical training center. Table 3-1 of the RFA provides a general description of the former facilities at LAFB. The primary mission at LAFB through its 57 years of operational history focused on training Air Force personnel. Based on the operational history, training programs at LAFB focused on armament and photographic training. However, a variety of base-related operations such as routine aircraft overhaul and maintenance (prior to 1966) as well as facility maintenance activities occurred prior to base closure. The potential contaminants of concerns identified in this section are summarized based upon the RFA, which examined the base operations and an understanding of Air Force standard operating procedures and programmatic Air Force knowledge.

The RFA divided the identification of potential contaminants of concern into those associated with training programs and those associated with daily base operations. As for training programs at LAFB, chemicals and materials were generally used in quantities appropriate for instructional purposes, including the use of mockups. The types of chemicals that were potentially used, stored, and disposed of for training purposes included volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), radionuclides, metals, petroleum-based products, explosives, and ordnance-related materials.

The training programs and the facilities associated with that training listed below are an indication of the various training programs throughout the operational duration of LAFB that may have resulted in potential environmental concerns, and include:

Armament-Related Training (including small arms): Facilities where personnel were trained on the proper maintenance, handling, storage, and loading operations for conventional weapons. Potential contaminants of concern include petroleum, oil, and lubricant (POL) products, organic chemicals, heavy metals, and solvents.

Chemical Warfare Training: Facilities where personnel were trained in chemical warfare including incendiary control, decontamination, and first-aid training for gas casualties. Potential contaminants of concerns include tear gas, radiological, POL products, solvents, organic chemicals, and heavy metals.

Fire Fighting Training: Open areas, vehicle and aircraft mockups, and buildings used to train personnel on extinguishing fires. Potential contaminants of concern include flammable material used to fuel fires (POL, spent solvents and off-spec fuels); water and chemical based foams, powders used to extinguish fires (organic chemical); and, dioxins generated during chlorinated-fuel combustion.

Flight Training: Facilities associated with flight training. Potential contaminants of concern include POL products and solvents.

Missile Training (guided and ICBM): Facilities associated with missile (e.g., Snark, Titan, and Peacekeeper) training and inspection. Potential contaminants of concern include radiological, POL products, solvents, organic chemicals, and heavy metals.

Ordnance Training: Facilities associated with small and medium-caliber (i.e., 20mm arms firing ranges, skeet and trap ranges, aircraft machine gun “pits,” and ordnance storage facilities). Potential contaminants of concern include radiological, POL products, solvents, organic chemicals, and heavy metals.

Photography and Cinematography Training: Facilities associated with the development of film and maintenance of photography equipment. Potential contaminants of concern include POL products, radiological, organic chemicals, and heavy metals.

Precision Measurement Equipment Laboratory (PMEL) Training: Facilities associated with field-level maintenance and calibration of test, measurement, and diagnostic equipment (TMDE). Potential contaminants of concern include radiological, mercury, and hydrocarbons.

In addition during its operational existence, LAFB was comprised of over 1,000 facilities (e.g., buildings, structures, or areas) that supported training, maintenance, and other missions. Although the initial training facilities were located in the western portion of the base, the tremendous expansion experienced in a relatively short period of five (5) years (during World War II) led to the construction of additional training facilities in the eastern portions of the base. A large infrastructure was developed to support and sustain a residential and working population that ranged from less than 200 to more than 10,000 people annually. These facilities included gas stations, garages, machine shops, hobby facilities, outdoor maintenance facilities, steam plants, and steam lines for heating. Other features of the infrastructure that are relevant to environmental concerns included storage and warehousing of materials and chemicals, waste accumulation facilities, and onsite disposal facilities. Other prominent features of the

infrastructure were the sewer lines or septic systems, sumps, oil-water separators, and floor drains, as these are potential release points to the subsurface. Generally, potential contaminants of concern include fuels used in emergency power generating units; associated underground storage tanks, pipelines, and above ground storage tanks; POL products; solvents; organic chemicals; paints; asbestos; pesticides, herbicides, PCBs, other organic chemicals, and heavy metals.

D. PROCEDURES FOR CONSTRUCTION OVERSIGHT AND REPORTING OF SUSPECT MEDIA OR DEBRIS

In order to mitigate any potential release or threatened release of hazardous substances as a result of redevelopment activities, LAC will provide construction oversight services for soil disturbing activities at LAFB, within the boundaries defined in the Consent Agreement (excluding the DFAS property west of Quebec Street). LAC is coordinating closely with the LERA on notifying potential purchasers of the property of the SMP, and the requirements of LAC under the Consent Agreement. LAC is entering into separate oversight agreements with each developer and the Colorado Community College System (CCCS) on the former HEAT campus in order to execute this task, and address the issue of responsibility and liability for potential discoveries on each respective parcel.

Construction oversight services include the necessary observation and documentation of soil excavation activities within the geographic boundaries of LAFB, excluding the DFAS property west of Quebec Street, with the intent of identifying any unknown environmental contamination and minimizing potential releases to the environment. This oversight will include visual or olfactory observations during the excavation of soil during the Project as defined in the Consent Agreement.

Excavation means foundation excavations, underground utility installations, and other material excavations of the land surface. Excavation excludes the following: normal maintenance and operation associated with the current ownership of already redeveloped commercial or residential property; clearing and grubbing; site preparation; normal maintenance and operation of the golf course; existing parks, including repairs and maintenance to sprinkler systems; and planting of flowers, trees and shrubs. Existing roads and right of ways not located in the NWN of LAFB are also excluded.

LAC may request a waiver of construction oversight if the site has already been excavated and redeveloped by either the LERA or other third parties or upon written approval of the CDPHE. Information to request for this waiver may include, but not be limited to, documentation of previous remedial activities, visual inspections, documentation of redevelopment activities such as addition of fill, installation of utilities, etc.

- Except in the case of an emergency, the oversight process will be implemented when a dig notification is provided to LAC by telephone or email. As noted above, LAC will have separate agreements (Oversight Agreements) with various future owners, including the LERA and CCCS, which articulate the notice requirement (between 24 to 48 hours advance notice).

- LAC will perform a review of existing environmental reports and historical use information to identify for the Owner and the CDPHE any potential environmental contamination issues associated with these locations. Activities associated with this task will be documented in the monthly progress report to the CDPHE.

- In emergency situations, such as a broken water line or utility repair, the Owner will notify LAC as soon as practicable, and LAC will inspect the excavation as soon as practicable.

1. Oversight Procedure

a) LAC will provide an oversight technician (technician) with a State of Colorado asbestos building inspector certification (or other appropriate certification, i.e. Abatement Worker or Air Monitoring Specialist) and OSHA 40-hour HAZWOPER training, to perform field monitoring for all possible environmental contamination. The technician will screen for the usual and customary indicators of contamination, such as discolored soil, visible free product, and odor, as well as friable and non-friable asbestos debris. If required by this SMP or CDPHE, the technician will screen for potential hazards to human health using a photoionization detector and/or field detector tubes and set up appropriate safety control measures if necessary.

2. Reporting Potentially Contaminated Media

a) If the field technician suspects or detects potentially contaminated media, he or she shall immediately notify the LAC Oversight Coordinator or designee:
   - LAC Oversight Coordinator Telephone: **303-972-6633**

b) The Inspector will take appropriate actions to prevent exposures to workers and surrounding areas from any suspect materials. Action levels will be set based on specific equipment and calibration, and will meet the minimum described in the LSAL, attached as Table 5-1, and in accordance with the Response Action Matrix, attached as Table 7-1.

c) The LAC Coordinator will confirm the observations and determine whether additional investigation must be performed before construction activities resume.

d) Activities may continue if the potentially contaminated area is isolated or in one distinct area of the disturbance, and will remain undisturbed by continued work in other areas of the site.

e) The LAC Coordinator will verbally notify the CDPHE Project Manager for LAFB of the observations based on Response Matrix, attached as Table 7-1, and follow up the verbal notification by email. LAC will also notify the Owner of the property under its Oversight Agreement.

E. GENERAL PROTOCOLS FOR HANDLING PARTICULAR CONTAMINANTS OF CONCERN

1. Protocols for Handling Suspect Contaminated Soils (Non-asbestos)

If potentially contaminated soils are encountered during excavation that is not associated with asbestos, the following procedures will be followed:

a) Excavation

i) When potentially contaminated soil is encountered during excavation under LAC oversight, the procedures outlined in the Response Matrix will be initiated. Initially, a determination as to whether excavation will continue and an assessment of sampling needs will be made. LAC may excavate these soils for characterization and disposal in accordance with the specifications of the Response Matrix (See Table 7-1).

ii) After the potentially contaminated soil has been excavated, that soil will be managed as hazardous waste, unless LAC can determine based upon visual and olfactory observations, historical information or field testing that the potentially contaminated soil is non hazardous or sample results determine it is not a hazardous waste.

(a) In the event that potentially contaminated soil is hazardous, RCRA requires that all hazardous wastes must be containerized. In addition, RCRA hazardous waste cannot be stored for more than ninety (90) days without written approval from CDPHE. The ninety (90) days begin when the soil is removed from the excavation.
(b) In the event that the contaminated soil is contaminated with petroleum, the soil will be handled in accordance with the regulations of the Colorado Department of Labor Division of Oil and Public Safety (See 7 Colorado Code of Regulations sections 1101-14).
(c) In the event that the potentially contaminated soil is special waste and/or a solid waste, as that term is defined in RCRA, LAC will address that waste pursuant to the applicable Colorado statutes and regulations.

b) Sample Collection

i) LAC will collect samples prior to excavation from the potentially contaminated soil in order to characterize the potential contaminant(s). Samples shall be analyzed for applicable waste profile parameters as specified in the Response Matrix and any additional parameters as specified by CDPHE. Samples will be collected according to the protocols listed below and submitted to a laboratory for analysis.

(a) The impacted soil within the excavation shall be collected from locations that appear to be the most contaminated and an appropriate number of samples will be collected to characterize the observed contamination. LAC will consult with CDPHE on the timing and frequency of sampling, and the parameters of the sampling suite.

(b) Samples shall be collected by using appropriate personal protective equipment (PPE).
(c) Samples shall be collected using appropriate sample containers and preservatives following USEPA protocols.
(d) Samples shall be collected practicing appropriate decontamination procedures when necessary.
(e) Samples shall be collected by practicing the following field quality assurance/quality control (QA/QC) as discussed in Section F of the SMP.

c) Waste Disposal Requirements

Based on laboratory analytical results and comparison of results to the RCRA waste characteristics, a disposal facility will be chosen and the appropriate manifests will be generated for disposal off-site.

2. Procedures for Handling Potential Asbestos Containing Material in Soil

LAFB has two regulatory processes for addressing potential asbestos in soil issues. Both are identified below:

a) LAFB Northwest Neighborhood (NWN):

The NWN is defined as bounded by East 8th Avenue to the south; East 11th Avenue to the north; Quebec Street to the west; and Uinta Way to the east. There are known remedial actions associated with formerly owned Air Force property that will be performed within the NWN pursuant to the Consent Agreement. The scope of those remedial actions will be addressed as approved by CDPHE in a separate work plan under this Transition Plan. In addition, there are ongoing remedial actions by homebuilders in the NWN, as required under the Compliance Advisories issued by CDPHE on April 24th and 30th, 2003.

b) Remainder of LAFB, including within the historical boundaries:

As noted above in Section 2.B. of the SMP, the LERA has implemented the Lowry Decision Tree (Exhibit 6), approved by CDPHE on August 3, 2004. Since this time, the CDPHE has implemented new regulations with respect to asbestos in soil. Exhibit 7, Asbestos Soils Characterization and Management Plan for LAFB, integrates the new regulations and the Decision Tree in order to implement soil management protocols and a process of regulatory closure for asbestos issues. Unknown discoveries of asbestos in soil on the parcels in the NWN after a No Further Action has been issued would be addressed under this plan.

F. REQUIREMENTS TO ACHIEVE CLOSURE (NON-ASBESTOS CONTAMINATED SOILS)

After non-asbestos contaminated soils have been remediated in accordance with Section C of the SMP, including any additional requirements implemented at the request of CDPHE, confirmatory soil samples will be collected from the floor and walls of the excavation. LAC will discuss with CDPHE the appropriate number of samples to be collected to characterize the

excavation for closure. At a minimum, one sample should be collected from each of the four walls and one sample from the floor of the excavation.

1. Quality Control Requirements

QC samples will be analyzed as specified below:

QC Type	Frequency
Trip Blank	One per cooler containing VOCs
Field Duplicate	10%
Matrix Spike/ Matrix Spike Duplicate	10%
Equipment Blank	One per activity if equipment is reused

One trip blank will accompany each cooler of samples sent to the laboratory for analysis of VOCs to assess the potential introduction of contaminants from sample containers or during the transportation and storage procedures. Equipment blanks will not be collected if new sampling equipment will be used for every sample.

To assess precision of the sample collection process, field duplicate samples will be collected simultaneously or in immediate succession, using identical recovery techniques, and treated in an identical manner during storage, transportation, and analysis. The sample containers are assigned an identification number in the field such that they cannot be identified as duplicate samples by laboratory personnel performing the analysis (blind duplicate). Specific locations are designated for collection of field duplicate samples prior to the beginning of sample collection. Field duplicates will be collected at a frequency of one in 10 samples collected.

2. Laboratory Analysis

These samples will also be submitted to the laboratory for quick turn-around to obtain results in a timely manner in order to determine the appropriate additional remedial action and disposal options.

The samples will be analyzed for a wide range of analyses, listed in the Response Matrix and any site specific additional analyses that CDPHE may require (Table 7-1). Table 5-1 provides the analytes for each group. Based on the historical knowledge and operations of a particular site, the analyses may be limited or expanded to include the appropriate analytical groups, such as VOCs, SVOCs, heavy metals, etc.

If petroleum products are found, the analytical suite will include total petroleum hydrocarbons (TPH), BTEX, and PAHs as required by the Colorado Department of Labor and Employment, Division of Oil and Public Safety (OPS). A more detailed description of the requirements for petroleum-contaminated soil is presented below.

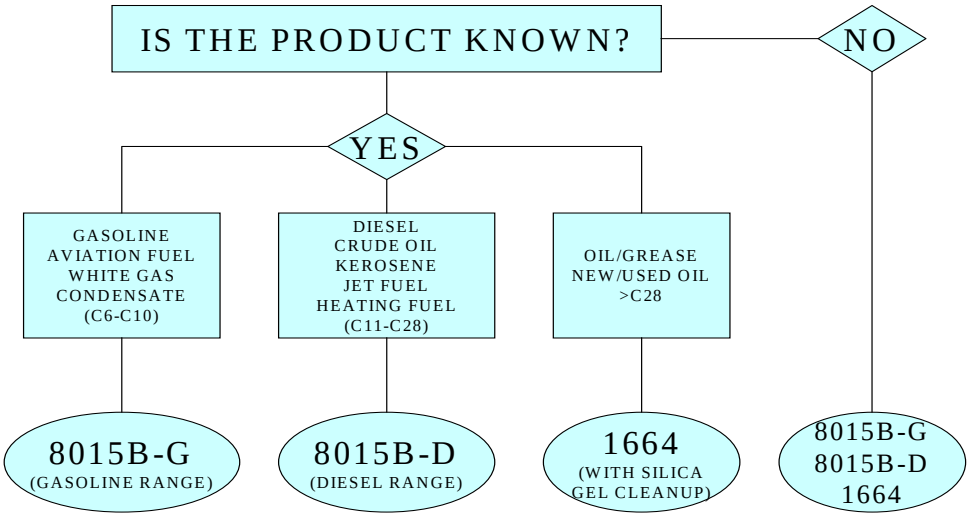
a) Petroleum products

If petroleum products are observed, LAC will follow the *Colorado Department of Labor, Oil Inspection Section, Owner/Operator Guidance,* dated May 2005.

All samples collected are required to be analyzed for BTEX. These compounds should be analyzed using USEPA methods 8021or 602 as presented in SW-846, or an equivalent method approved by the OPS. EPA method 8260 may also be appropriate, especially in cases where a waste oil tank is/was present.

All samples collected are required to be analyzed for TPH. TPH should be analyzed using USEPA methods 1664 or 8015B as presented in SW-846, or an equivalent method approved by the OPS. The following flow chart may be used to determine the appropriate analytical method based on the product type at the site.

ANALYTICAL METHODS FOR TPH



If TPH concentrations exceed 500 parts per million (ppm), and BTEX concentrations are below the site cleanup goal, then a sample taken from the location where the TPH concentration was the highest must be analyzed for the priority PAHs. The priority PAHs are listed below:

- Acenaphthene
- Acenaphthylene
- Anthracene
- Benzo(a)anthracene
- Benzo(a)pyrene
- Benzo(b)flouranthene
- Benzo(g,h,i)perylene
- Benzo(k)fluoranthene
- Chrysene
- Dibenzo(a,h)anthracene
- Flouranthene
- Flourene
- Indeno(1,2,3-c,d)pyrene
- Naphthalene
- Phenanthrene
- Pyrene

The OPS requires that soil samples for laboratory analysis be collected from the locations most likely to be contaminated. At a typical UST closure site, samples must be collected from under

the tanks, near the dispensers and along the dispensing lines, in areas where staining or odors are noted, and/or in areas with elevated field instrument readings.

If the concentrations are lower than the Tier 1 RBSLs for all completed pathways, and the TPH threshold has not been exceeded, a No Further Action Required designation may be requested. If the source concentrations exceed the Tier 1 RBSLs, the owner/operator may proceed to Tier 1A, or to a CAP, which may include proposed corrective actions and a Tier 2 evaluation.

3. Data Evaluation

The LSAL (Table 5-1) will be used to compare to sample results. If soil concentrations are below these values, the site may be recommended for no further action. If there are exceedances of these values, further actions such as investigative sampling, risk assessment, remedial actions, or additional excavation with confirmation sampling may be recommended. If addition excavation is required, LAC will submit modifications to CDPHE to address any additional issues for closure.

In accordance with Paragraph 50 of the Consent Agreement, within ninety (90) days of completion of required corrective actions, LAC will submit a Notice of Completion. The Notice of Completion may include, but not be limited, to the following summarizing the investigation and sampling will be submitted to CDPHE:

- Executive Summary
    - Describe product or contaminant found
    - Show highest concentration of contaminants left in place
    - Compare to Lowry Soil Action Levels and Groundwater action levels, as appropriate
- Site Description with Location Map
- Investigation Description with field observations and Sampling Map
- Data Evaluation with Laboratory Results Table
- Justification for Notice of Completion request
- Appendices including Laboratory reports, chain of custody forms and Disposal Documentation

G. Annual Training

LAC will offer annual awareness training and/or publications to anyone who may be working with the soil at LAFB, through either redevelopment activities or maintenance and repairs of existing systems, including Owners and their workers at LAFB. Such training will focus on the following topics:

- Summary of the SMP and any amendments thereto,
- Any additional requirements mandated by local, State or Federal law, and
- Any modifications to the known conditions at the site.

LAC will publish such meeting dates in conjunction with CDPHE and the LERA. The training offered by LAC is intended to provide the public with general information relating to its activities

and programs at LAFB. This training is not intended to replace or substitute for notification or communication with LAC on specific oversight activities and protocols regarding discoveries of potential environmental issues at LAFB. LAC will publicize the training through available channels and through contractual agreements with property owners.

Table 7-1 Response Matrix

Issue/Field Observations/Contaminant	IH Response	Initial Action	Disposal Sampling Parameters	Follow-On	Closure Sampling Parameters	Reference/Standard/ Guidance	Reporting to CDPHE
Asbestos - Non-Friable	None	Bag, and dispose, Continue excavating with oversight, following decision matrix		If amount exceeds 55 gallon drum, permit and submit letter describing scope, and disposal plan		Soils Characterization and Management Plan (Tab**)	Air Div Permit
Asbestos Friable	Hydrate, cover with poly, and restrict access or Mag Chloride and restrict access	Continue excavating with oversight, following decision matrix	Confirmation that material contains asbestos will be done by PLM, or material will be assumed to be ACM	If amount exceeds 55 gallon drum (including contam soil 3cf=22 gal), notify CDPHE, permit and submit workplan with emissions control Continue with GAC		Soils Characterization and Management Plan (Tab**)	Air Div permit, summary report from GAC
Asbestos found in the Northwest Neighborhood			Confirmation that material contains asbestos will be done by PLM, or material will be assumed to be ACM			Compliance Advisory	Air Div permit, summary report from GAC
Fly Ash	Control dust with water, Limit Skin contact	Continue excavating controlling visible dust	TCLP RCRA 8 Metals, PAH (verify with facility)	Excavated spoils can be place back in trench except the 0-2 foot interval must be clean fill or spoils may be disposed of as special waste based upon analytical results	Metals, PAH	Lowry Action Level Table	Monthly report or closure summary letter
Groundwater	Check with OVA/PID; limit skin contact	OVA in breathing zone greater than 2.5 ppm stop work	VOCs/BTEX	If groundwater is encountered in an area over one of the known groundwater plumes or suspected to be contaminated, groundwater should be containerized, sampled and disposed appropriately by Owner/Developer of site			Email notification; Monthly Report
Non-covered conditions - biological weapons, chemical weapons, nuclear devices and components (P2)		Stop Work, secure site		LAC notify AF within 48 hours			Notify w/in 24 hrs
Non-covered conditions - radiological; military munitions; biological warfare agents; chemical warfare agents; nuclear devices and components (P1 - for OU2 and OU5)		Stop Work, secure site		LAC notify AF within 48 hours			Notify w/in 24 hrs
Oily Soil	Monitor OVA/PID	OVA in **breathing zone** greater than 2.5 ppm stop work. Segregate impacted soil, stockpile on poly and restrict access. Sample impacted soils in excavation per closure sampling parameters.	TCLP Benzene, TCLP Lead (If from leaded gasoline suspected), Paint filter or certification	If OVA readings in breathing zone below 2.5 ppm continue to limits of planned excavation. Sample pile for disposal and sample walls and floor of excavation for closure.	TPH by 8015B (gas, Diesel or oil range) and BTEX (8021). If THP>500 analyze for priority PAHs by 8270 as per OIS	Petroleum Storage Tank Owner/Operator Guidance Document, May 2005.	Monthly report or closure summary letter; if hazardous report within 24 hr of determination

Table 7-1 Response Matrix

Issue/Field Observations/Contaminant	IH Response	Initial Action	Disposal Sampling Parameters	Follow-On	Closure Sampling Parameters	Reference/Standard/ Guidance	Reporting to CDPHE
Potential Disposal Area - Bulk Containers	Check with OVA/LEL	Bring in OSHA-trained crew	TCLP, flash point, pH, reactivity as applicable based on contents of containers	Sample bulk wastes and dispose, sample soil beneath containers	VOC, SVOC, Metals, PCB as applicable based on contents of containers	Lowry Action Level Table	Notify w/in 24 hrs
Potential Disposal Area - Petroleum, Solvents, PCB, Fly Ash	OVA/PID Limit skin contact, suppress dust	OVA in breathing zone greater than 2.5 ppm stop work	VOC, TCLP RCRA 8 metals, Paint filter test, PCB screen	If OVA readings below 2.5 ppm. Sample pile for disposal and sample walls and floor of excavation for closure	VOC, SVOC, Metals, PCB	Lowry Action Level Table	Notify w/in 24 hrs
Tank - Petroleum	Check with LEL, OVA	OVA in **breathing zone** greater than 2.5 ppm stop work. Continue excavation with air monitoring, use LEL if confined space.	TCLP Benzene, TCLP Lead (If from leaded gasoline suspected), Paint filter or certification	Remove tank according to LUST requirements	TPH by 1664, 8015B (gas and Diesel), MTBE and BTEX. If TPH>500 analyze for priority PAHs by 8270 as per OIS	Petroleum Storage Tank Owner/Operator Guidance Document, May 2005.	Monthly report or closure summary letter
Tank - Septic	Check with OVA	OVA in **breathing zone** greater than 2.5 ppm stop work	VOC, TCLP RCRA 8 metals, Paint filter test or certification, PCB screen	Sample any sludge present, remove tank and sample discolored soil beneath if present. Follow Piping to leach field	VOC, SVOC, RCRA 8 Metals, PCB	Lowry Action Level Table	Monthly report or closure summary letter; if hazardous report within 24 hr of determination
Tank, Pit, Sump - Oil Water Separator	Check with OVA	OVA in breathing zone greater than 2.5 ppm stop work	VOC, TCLP RCRA 8 metals, Paint filter test, PCB screen	Sample any sludge present, remove tank and sample discolored soil beneath if present.	TPH, VOC, metals	Lowry Action Level Table, OIS if applicable	Monthly report or closure summary letter; if hazardous report within 24 hr of determination
Transformers or Potential PCB Wastes	Limit skin contact, suppress dust	Continue excavation	PCB screen, VOC 8260, RCRA 8 metals	Sample pile for disposal and sample walls and floor of excavation for closure	PCB, TPH	Lowry Action Level Table	Monthly report or closure summary letter
Unexploded Ordnance	Restrict access	Stop Work, secure site		LAC call in UXO Contractor			Notify w/in 24 hrs
Bullet Fragments	Restrict access	Bag, and dispose, Continue excavating with oversight. If volume is greater than 3 cubic feet LAC will call in Remediation Contractor	TCLP Lead <5 mg/kg	Sample pile for disposal and sample walls and floor of excavation for closure	Total Lead <400 mg/kg	Lowry Action Level Table	Email notification; Monthly Report

VIII. CLOSURE COST ESTIMATES

Pursuant to 6 CCR 1007-3 Sections 266.14, LAC is required to provide and maintain financial assurance for all activities required pursuant to the Consent Agreement. LAC established a Closure/Post Closure Trust Fund in accordance with Section 266.14(a) as the mechanism for financial assurance for corrective action measures applicable to the matters within the scope of Paragraphs 18 through 18i. This mechanism is being used for all corrective action activities required pursuant to the Consent Agreement, not just closure and/or post-closure.

In addition as a requirement of Lowry 2, LAC has placed a Remediation Cost Cap (RCC) insurance policy with Quanta Indemnity Company. The RCC provides insurance coverage for cost overruns and for unknown discoveries of environmental issues associated with the known remediation work. The limits of this policy are $24 million.

Those areas with known corrective action measures are as follows:

- Building 606 site (former gas station)
- Outdoor Firing Range
- Fire Training Zone
- Building 898 (former dental clinic)
- Abandonment of 2 deep wells near E. 10th Avenue & Dayton Street and in the Great Lawn area
- Further investigation and any necessary remedial action for sites identified in the RFA
  - Building 416/1016 septic tank and UST
  - Building 546 – former dental clinic
  - Building 568 – former medical/dental clinic
  - Building 753 – former dental clinic
  - Building 1496A/1493 – gasoline UST
  - Building 1499 – solvent disposal
  - PAA_2 – potential dumping west of Dayton Street and north of the Outdoor Firing Range
  - Building 777
- Asbestos Contaminated Soils in the Northwest Neighborhood

Under paragraph 23a of the Consent Agreement on February 21, 2006, LAC provided CDPHE with its current cost estimate for closure. On April 18, 2006, LAC funded the State Trust in accordance with Paragraph 62 of the Consent Agreement.

On an annual basis thereafter, LAC will provide then current cost estimates for closure in accordance with the Consent Agreement. CDPHE recognizes that LAC is subject to the four year pay-in schedule from the Air Force under the Cooperative Agreement, and amendments thereto, to fund these environmental issues, and LAC is allowed to have a multiple year pay-in period to fully fund the financial assurance mechanism.

If additional environmental scope items are identified which require financial assurance, LAC will provide closure cost estimates consistent with the terms of the Consent Agreement.

APPENDIX A - ADMINISTRATIVE RECORD DOCUMENTS

June 1993	Installation Restoration Program (IRP) Supplemental Remedial Investigation/Feasibility Study, Sampling and Analysis Plan for the Landfill Zone, Fire Training Zone, and Fly Ash Disposal Area/Westerly Creek; Engineering Science
Sept 1993	Final, Installation Program, Supplemental Restoration Investigation/Feasibility Study, Work Plan of the Landfill Zone, Fire Training Zone, and Fly Ash Disposal Area/Westerly Creek; Engineering Science
Dec 1993	Basewide Environmental Baseline Survey, Lowry Air Force Base; Halliburton NUS Corp
Mar 1994	Final Installation Restoration Program, Supplemental Remedial Investigation/Feasibility Study Sampling and Analysis Plan Addendum for the Coal Storage Zone (East), Coal Storage Yard (West), and Auto Hobby Shop; Engineering Science
April 1994	Supplemental Remedial Investigation/Feasibility Study Site Characterization Summary Informal Technical Information Report for the Landfill Zone, Fire Training Zone, and Fly Ash Disposal Area, Volume II; Engineering Science
April 1994	Supplemental Remedial Investigation/Feasibility Study Site Characterization Summary Informal Technical Information Report for the Landfill Zone, Fire Training Zone, and Fly Ash Disposal Area, Volume I; Engineering Science
July 1994	Revised Draft Final Facility Assessment Work Plan; Engineering Science
July 1994	Revised Draft Final Facility Assessment Sampling and Analysis Plan; Engineering Science
July 1994	Supplement Remedial Investigation/Feasibility Study Site Characterization Summary Informal Technical Information Report for the Coal Storage Zone (East), Coal Storage Yard (West), and the Auto Hobby Shop; Engineering Science
Aug 1994	Record of Decision on the Disposal of Lowry Air Force Base; US Air Force
Oct 1994	Final Installation Restoration Program Facility Sampling and Analysis Plan; Engineering Science
Oct 1994	Final Facility Assessment Work Plan; Engineering Science
Oct 1994	Final Facility Assessment Sampling and Analysis Plan; Engineering Science

Mar 1995 Facility Assessment Analytical Data Informal Technical Information Report; Parsons, Inc.

April 1995 Draft Final Supplemental Remedial Investigation Report for the Fire Training Zone Soils; Volumes I and II; Parsons, Inc.

May 1995 Installation Restoration Program, Supplemental Remedial Investigation/Feasibility Study, Second-Round Groundwater Sampling Addendum to the Site Characterization Summary Informal Technical Information Report Landfill Zone, Fire Training Zone, Fly Ash Disposal Area, Coal Storage Zone (East), Coal Storage Yard (West), Auto Hobby Shop, and Background Wells; Parsons, Inc.

Aug 1995 Final Supplemental Remedial Investigation Report for the Fire Training Zone Soils Volumes I & II; Parsons, Inc.

Nov 1995 Draft Final No Further Response Action Planned Decision Document for the Fire Training Zone; Parsons, Inc.

Jan 1996 Draft Final Installation Restoration Program Facility Assessment Technical Report, Volumes I and II; Parsons, Inc.

May 1996 Final Installation Restoration Program Facility Assessment Technical Report, Volumes I & II; Parsons, Inc.

April 1997 Draft Phase II Environmental Baseline Survey Investigation Report; Versar, Inc.

July 1997 Final - Environmental Baseline Survey Letter Work Plan for Performing Mercury Investigations; Versar, Inc.

Dec 1997 Oil/Water Separator –Building 606; Dames and Moore, Inc.

Dec 1997 Final Site Report Building 606; Dames and Moore, Inc.

May 1998 Environmental Restoration Program, Draft Final, Mercury Survey Report
Phase III Environmental Baseline Survey; Versar, Inc.

May 1998 Draft Final Work Plan for Investigating the Outdoor Firing Range and Surrounding Area; Versar, Inc.

July 1998 Draft Final Letter Work Plan to Support the Fire Training Zone Feasibility Study; Versar, Inc.

Aug 1998 Draft Final Phase II Environmental Baseline Survey Investigation Report; Versar, Inc.

Oct 1998 Work Plan for investigating the Outdoor Firing Range and Surrounding Area; Versar, Inc.

Dec 1998 Final Letter Work Plan to Support the Fire Training Zone Feasibility Study; Versar, Inc.

Feb 1999 Phase III Environmental Baseline Survey, Mercury Survey Report, Lowry AFB; Versar, Inc.

Feb 2000 Draft Final Addendum to the October 1998 Work Plan for Investigating the Outdoor Firing Range and Surrounding Area; Versar, Inc.

Aug 2000 Draft Final, Investigation Report of Sampling to Support the Fire Training Zone Feasibility Study; Versar, Inc.

Oct 2000 Draft Final Work Plan for Phase III Environmental Baseline Survey Investigations; Versar, Inc.

Oct 2000 Final Addendum to the October 1998 Work Plan for Investigating the Outdoor Firing Range and Surrounding Area; Versar, Inc.

May 2001 Draft Final Addendum to the Final Letter Work Plan to Support the Fire Training Zone Feasibility Study; Versar, Inc.

May 2001 Final, Investigation Report of Sampling to Support the Fire Training Zone Feasibility Study; Versar, Inc.

Sept 2001 Final Addendum to the Final Letter Work Plan to Support the Fire Training Zone Feasibility Study; Versar, Inc.

Dec 2001 Draft Final Second Addendum to the Final Work Letter Plan to Support the Fire Training Zone Feasibility Study; Versar, Inc.

July 2002 Work Plan for Phase III Environmental Baseline Survey Investigations and Report of the Site Status; Versar, Inc.

July 2002 Report of the January 2002 Phase III Environmental Baseline Survey Mercury Survey of Building 898; Versar, Inc.

Aug 2002 Draft Final Work Plan, Former Buildings 606 and 1437 Groundwater Monitoring Program; EarthTech, Inc.

Sept 2002 Draft Final, Investigation Report of Dioxin Sampling to Support the Fire Training Zone Feasibility Study; Versar, Inc.

Dec 2002 Phase III Environmental Baseline Survey Mercury Survey of Building 898; Versar, Inc.

Dec 2002	Final Investigation Report of Dioxin Sampling to Support the Fire Training Zone Feasibility Study; Versar, Inc.
Dec 2002	Final Corrective Action Plan Implementation Report Building 606; Versar, Inc.
Feb 2003	Outdoor Firing Range Supplemental Site Characterization Approach Work Plan; CH_2MHill
Mar 2003	Draft Final Work Plan for Supplemental Characterization, Outdoor Firing Range; CH_2MHill
April 2003	Final Work Plan for Supplemental Characterization Outdoor Firing Range; CH_2MHill
April 2003	Draft Final First Quarter Groundwater Monitoring Results: Former Buildings 606 and 1437; EarthTech, Inc.
May 2003	Draft Final Second Quarter Groundwater Monitoring Results former Buildings 606 and 1437; EarthTech, Inc.
July 2003	Draft Final Fire Training Zone Engineering Evaluation/Cost Analysis; Versar, Inc.
July 2003	Draft Final Analytical Data Informal Technical Report Outdoor Firing Range Supplemental Characterization; CH_2MHill
Aug 2003	Draft Final Third Quarter Groundwater Monitoring Results Former Buildings 606 and 1437; EarthTech, Inc.
Aug 2003	Draft Final Remedial Investigation Report for Supplemental Characterization Outdoor Firing Range; CH_2MHill
Aug 2003	Asbestos/Building Demolition Survey Summary; Air Force Real Property Agency
Sept 2003	Final Fire Training Zone Engineering Evaluation/Cost Analysis; Versar, Inc.
Oct 2003	Final Remedial Investigation Report for Supplemental Characterization Outdoor Firing Range; CH_2MHill
Oct 2003	Revised Draft Final Fire Training Zone Action Memorandum
Oct 2003	Final Forth Quarter Groundwater Monitoring Results Former Buildings 606 and 1437; EarthTech, Inc
Nov 2003	Draft Final Engineering Evaluation/Cost Analysis Outdoor Firing Range
Nov 2003	Draft Final Work Plan for Polychlorinated Biphenyl (PCB) Removal at Building 402 and Grease Trap Closure at Building 667; CH_2MHill

Dec 2003 Final Fire Training Zone Action Memorandum; CH_2MHill

Dec 2003 City and County of Denver Phase 2A, Property Located NW, West. And South of the pre-school and Toddler Playground Area, Lowry Montessori Child Care Center, Asbestos Services; Herron Enterprises USA, Inc.

Dec 2003 City and County of Denver Phase 2A, Area 1, Fenced Area North and East of the Pre-School and Toddler Playground Areas, Lowry Montessori Child Care Center; Herron Enterprises USA, Inc.

Jan 2004 Draft Final Field Sampling Plan Long-Term Monitoring for Radiological Parameters at Operable Unit 2; Cabrera Services, Inc.

Jan 2004 Draft Final Quality Assurance Project Plan Long-Term Monitoring for Radiological Parameters at Operable Unit 2; Cabrera Services, Inc.

Jan 2004 Draft Final Site Health and Safety Plan Long-Term Monitoring for Radiological Parameters at Operable Unit 2; Cabrera Services, Inc.

Jan 2004 Final Work Plan for Polychlorinated Biphenyl (PCB) Removal at Building 402 and Grease Trap Closure at Building 667; CH_2MHill

Jan 2004 Draft Final Action Memorandum Outdoor Firing Range; CH_2MHill

Jan 2004 Final Engineering Evaluation/Cost Analysis Outdoor Firing Range; CH_2MHill

Feb 2004 Draft Final Work Plan for the Removal Action at The Fire Training Zone; Gomez MTARRI Joint Venture

Mar 2004 Final Fifth Quarter Groundwater Monitoring Results; Former Building 606; EarthTech, Inc.

April 2004 Draft Final Explosives Safety Submission Outdoor Firing Range; CH_2MHill

April 2004 Draft Final Munitions and Explosives of Concern Removal Action Work Plan Outdoor Firing Range; CH_2MHill

May 2004 Final Summary Report of Soil Potentially Contaminated with Asbestos at Building 670; EarthTech, Inc.

June 2004 City and County of Denver Phase 2B, Areas North and East of the Preschool and Toddler Playground Areas, Lowry Montessori Child Care Center Asbestos Services Report; Herron Enterprises USA, Inc.

July 2004 First Quarterly Monitoring Summary Report Long-Term Monitoring for Radiological Parameters at Operable Unit 2; Cabrera Services, Inc.

Sept 2004	Final Summary Report for Removal of Soil Potentially Contaminated with Asbestos at Building 670 Grid 405 former Lowry Air Force Base; EarthTech, Inc.
Oct 2004	Draft Sampling and Analysis Work Plan Asbestos Investigation at the Former Lowry AFB, Colorado Filing 16; Parsons, Inc.
Jan 2005	Final Soil Investigation Report for Filing 20 former Lowry Air Force Base, Colorado; Parsons, Inc.
Jan 2005	Final RCRA Facility Assessment Report Volumes I, II & III; CH_2MHill
Feb 2005	Draft Final Construction Closure Report Polychlorinated Biphenyl (PCB) Removal at Building 402 and Grease Trap Closure at Building 667; CH_2MHill
Mar 2005	Draft Final Simulation Work Plan Asbestos Investigation at Filing 16; Parsons, Inc.
April 2005	Draft Final Munitions and Explosives of Concern Removal Work Plan Outdoor Firing Range; CH_2MHill
April 2005	Draft Final Explosives Safety Submission Outdoor Firing Range; CH_2MHill
April 2005	Final Sampling and Analysis Plan Building 777 Former Lowry Air Force Base; PRI
April 2005	Final Sampling and analysis Plan Building 777; PRI
May 2005	Third Quarterly Monitoring Summary Report Long-Term Monitoring for Radiological Parameters Operable Unit 2; Cabrera Services, Inc.
May 2005	Groundwater Sampling Plan former Building 606, Lowry Assumption, LLC
Aug 2005	Groundwater Sampling Results former Bldg. # 606; EarthTech
Oct 2005	Final Summary Report for Removal of Asbestos-contaminated Soil at Filing 16; PRI
Oct 2005	Final Summary Report for Removal of Asbestos-contaminated Soil at Parcel T; PRI
Dec 2005	Comprehensive Summary Report Long-Term Monitoring for Radiological Parameters Operable Unit 2; Cabrera Services, Inc.

This property is subject to an Environmental Covenant held by the Colorado Department of Public Health and Environment pursuant to section 25-15-321, C.R.S.

ENVIRONMENTAL COVENANT

The United States of America, acting by and through the Secretary of the Air Force, under and pursuant to the powers and authority contained in the Defense Base Closure and Realignment Act of 1990, as amended (10 U.S.C. § 2687, note) ("Grantor") grants an Environmental Covenant ("Covenant") this 4th day of January, 2006 to the Hazardous Materials and Waste Management Division of the Colorado Department of Public Health and the Environment ("the Department") pursuant to § 25-15-321 of the Colorado Hazardous Waste Act, § 25-15-101, *et seq.* The Department's address is 4300 Cherry Creek Drive South, Denver, Colorado 80246-1530.

WHEREAS, the Grantor is the owner of certain property associated with the former Lowry Air Force Base ("LAFB"), located in Denver and Aurora, Colorado, more particularly described in Attachment A, attached hereto and incorporated herein by reference as though fully set forth (hereinafter referred to as the "Property"); and

WHEREAS, pursuant to Consent Agreement Number 01-08-07-02, the Property is the subject of enforcement and remedial action pursuant to the Colorado Hazardous Waste Act, § 25-15-301, et. seq. ("CHWA"). Historic Air Force activities resulted in chlorinated solvents, with the primary constituent of concern being trichloroethylene (TCE), contaminating the groundwater associated with the Property; and,

WHEREAS, the purpose of this Covenant is to ensure protection of human health and the environment by minimizing the potential for exposure to any hazardous substance, hazardous waste, hazardous constituents, and/or solid waste that remains in the alluvial groundwater beneath the Property. The Covenant will accomplish this by prohibiting those activities that may result in contact with groundwater and by creating a review and approval process to ensure that any such intrusive activities are conducted with appropriate precautions to avoid or eliminate any hazards; and

WHEREAS, the Grantor desires to subject the Property to certain covenants and restrictions as provided in Article 15 of Title 25, Colorado Revised Statutes, which covenants and restrictions shall burden the Property and bind the Grantor, and all parties having any right, title or interest in the Property, or any part thereof, its heirs, successors, assigns, and any persons using the land as described herein, for the benefit of the Department.

NOW, THEREFORE, the Grantor hereby grants this Environmental Covenant to the Department, and declares that the Property as described in Attachment A shall hereinafter be bound by, held, sold, and conveyed subject to the following requirements set forth in paragraphs 1 through 9 below, which shall run with the Property in perpetuity and be binding on Grantor and all parties having any right, title, or interest in the Property, or any part thereof, their heirs, successors and assigns, and any persons using the land, as described herein. As used in this Environmental Covenant, the term OWNER means the record owner of the Property and, if any,

EXHIBIT 1

any other person or entity legally authorized to make decisions regarding the transfer of the Property or placement of encumbrances on the Property, other than by the exercise of eminent domain.

1. Use restrictions

a. The OWNER shall not excavate into, extract or utilize, in any manner whatsoever any water from the alluvial aquifer and weathered Denver aquifer below the surfaces of the ground within the boundary of OU5 for any purpose whatsoever unless the OWNER shall first have obtained the prior written approval of the Department.

b. The OWNER shall not tamper with or damage in any manner any of the monitoring wells.

c. If groundwater is encountered during any excavation of soil at OU5, the OWNER shall notify the Department within two (2) business days of the incident, and must dispose of the groundwater in accordance with applicable federal, state, and local law and regulation, at its own cost and expense.

d. There are a series of monitoring wells on OU5. The OWNER shall notify the Department within forty-eight (48) hours of any damage to these wells of which it has knowledge. Unless otherwise agreed to by the Department, the OWNER, shall repair any damage to such wells or replace such wells at the OWNER's sole expense within ten (10) days.

e. Unless a written determination is obtained from the Department that such systems are not required, the OWNER shall, at its sole expense, install and arrange for maintenance of the following ventilation systems in structures constructed on OU5 after the date of this Covenant, unless deemed and verified unnecessary in writing by the Department.

1. Newly-constructed residential structures must contain a sub-slab depressurization system ("SSDS").

2. Newly-constructed commercial structures must contain either a heating, ventilating, and air conditioning system ("HVAC") which, while operating, is designed to provide an internal positive pressure in the building, and such HVAC must be operated in accordance with normal and customary operating procedures for similar buildings in Denver, Colorado and Denver City Ordinance or a SSDS.

The term "structures" as utilized herein shall not include garages or other outbuildings used primarily for storage, built slab on grade, where no soil excavation five (5) feet or more below the ground surface is necessary for the construction or operation thereof.

2. Modifications This Covenant runs with the land and is perpetual, unless modified or terminated pursuant to this paragraph. If a Completion Report is approved by the Department under the Consent Agreement No. 01-08-07-02, for all or a portion of the Property, which determines that the Property can be utilized for unrestricted use, this Covenant will be terminated as to that portion or all of the Property. In addition, the OWNER or its successors and assigns may request that the Department approve a modification or termination of the Covenant. The

request shall contain information showing that the proposed modification or termination shall, if implemented, ensure protection of human health and the environment. The Department shall review any submitted information and may request additional information. If the Department determines that the proposal to modify or terminate the Covenant will ensure protection of human health and the environment, it shall approve the proposal. No modification or termination of this Covenant shall be effective unless the Department has approved such modification or termination in writing. Information to support a request for modification or termination may include one or more of the following:

a) a proposal to perform additional remedial work;
b) new information regarding the risks posed by the residual contamination;
c) information demonstrating that residual groundwater contamination has diminished;
d) information demonstrating that the proposed modification would not adversely impact the remedy and is protective of human health and the environment; and,
e) other appropriate supporting information.

3. Conveyances The OWNER shall notify the Department at least fifteen (15) days in advance of any proposed grant, transfer, or conveyance of any interest in any or all of the Property.

4. Notice to Lessees The OWNER agrees to incorporate, either in full or by reference the restrictions of this Covenant in any leases, licenses, or other instruments granting a right to use the Property.

5. Notification for proposed construction and land use The OWNER and/or its transferees shall notify the Department simultaneously when submitting any application to a local government for a building permit or change in land use at the Property.

6. Inspections The Department shall have the right of entry to the Property at reasonable times with prior notice for the purpose of determining compliance with the terms of this Covenant. Nothing in this Covenant shall impair any other authority the Department may otherwise have to enter and inspect the Property.

7. No Liability The Department does not acquire any liability under State law by virtue of accepting this Covenant, nor does any other named beneficiary of this Covenant acquire any liability under State law by virtue of being such a beneficiary.

8. Enforcement The Department may enforce the terms of this Covenant pursuant to §25-15-322. C.R.S. The Grantor and any named beneficiary of this Covenant may file suit in district court to enjoin actual or threatened violations of this Covenant.

9. Notices Any document or communication required under this Covenant shall be sent or directed to:

Hazardous Waste Corrective Action Unit Leader
Hazardous Materials and Waste Management Leader
Colorado Department of Public Health and the Environment
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

IN WITNESS WHEREOF, I have hereunto set my hand at the direction of the Secretary of the Air Force, the day and year first above written.

THE UNITED STATES OF AMERICA

By: Kathryn M. Halvorson
KATHRYN M. HALVORSON
Director
Air Force Real Property Agency

Witness:
Kathryn Pitten

Commonwealth of Virginia):
)ss.
County of Arlington):

The foregoing instrument was acknowledged before me this 4th day of January, 2006, by Kathryn M. Halvorson as the Director of Air Force Real Property Agency.

Witness my hand and official seal

Notary Public
My Commissions Expires on September 30, 2009

PAUL C. MACPHERSON
NOTARY PUBLIC
COMMONWEALTH
OF VIRGINIA
My Commission Expires
September 30, 2009

(seal)

Accepted by the Colorado Department of Public Health and Environment this ____ day of _____ 2006.

By: _____
GARY BAUGHMAN
Director
Hazardous Materials Waste Division

STATE OF COLORADO)
) ss:
COUNTY OF DENVER)

The foregoing instrument was acknowledged before me this ___day of _____ 2006 by _____ on behalf of the Colorado Department of Public Health and Environment.

_____
Notary Public
Address: _____
My commission expires: _____

IN WITNESS WHEREOF, I have hereunto set my hand at the direction of the Secretary of the Air Force, the day and year first above written.

THE UNITED STATES OF AMERICA

By: _____
KATHRYN M. HALVORSON
Director
Air Force Real Property Agency

Witness:
_____

Commonwealth of Virginia):
)ss.
County of Arlington):

The foregoing instrument was acknowledged before me this 4th day of January, 2006, by Kathryn M. Halvorson as the Director of Air Force Real Property Agency.

Witness my hand and official seal

PAUL C. MACPHERSON
NOTARY PUBLIC
COMMONWEALTH
OF VIRGINIA
My Commission Expires
September 30, 2009

_____
Notary Public
My Commissions Expires on September 30, 2009

(seal)

Accepted by the Colorado Department of Public Health and Environment this ____ day of _____ 2006.

By: _____
GARY BAUGHMAN
Director
Hazardous Materials Waste Division

STATE OF COLORADO)
) ss:
COUNTY OF DENVER)

The foregoing instrument was acknowledged before me this ___day of _____ 2006 by_____ on behalf of the Colorado Department of Public Health and Environment.

_____
Notary Public
Address: _____
My commission expires: _____

ATTACHMENT A

DESCRIPTION
Main TCE Plume - Groundwater
within Parcel 1

A part of Lowry Filing No. 11, City and County of Denver, State of Colorado, being more particularly described as follows:

Beginning at the northwest corner of Tract PP of said Lowry Filing No. 11;

thence along the westerly line of said Tract PP the following eight (8) courses:

1. South 82°16'51" East a distance of 90.83 feet;
2. South 89°52'18" East a distance 55.02:
3. South 37°40'40" East a distance of 40.84 feet;
4. South 00°00'00" East a distance of 9.80 feet to a point of curve;
5. along the arc of a curve to the left having a central angle of 27°51'08", a radius of 737.00 feet, an arc length of 358.26 feet and whose chord bears South 13°55'34" East a distance of 354.75 feet;
6. South 27°51'08" East a distance of 92.40 feet to a point of curve;
7. along the arc of a curve to the right having a central angle of 21°39'06", a radius of 663.00 feet, an arc length of 250.54 feet and whose chord bears South 17°01'35" East a distance of 249.06 feet;
8. South 06°12'02" East a distance of 590.66 feet;

thence North 41°30'47" West a distance of 553.53 feet;
thence North 12°41'48" West a distance of 49.74 feet to a point of non-tangent curvature on the southeasterly line of Lot 1, Block 15 said Lowry Filing No. 11;
thence along said southeasterly line and the arc of a curve to the right having a central angle of 1°09'17", a radius of 530.00 feet, an arc length of 10.68 feet and whose chord bears North 48°46'25" East a distance of 10.68 feet to the most southerly corner of the exception parcel as described at Reception Number 2003029446 in the Clerk and Recorder's Office of said City and County of Denver;
thence North 41°46'02" West, along the southwesterly line of said exception parcel, a distance of 46.17 feet;
thence North 14°53'14" West a distance of 187.00 feet to a point of curvature;
thence along the arc of a curve to the left having a central angle of 53°13'20", a radius of 330.00 feet, an arc length of 306.54 feet and whose chord bears North 41°29'54" West a distance of 295.64 feet;
thence North 68°06'34" West a distance of 64.74 feet to a point of curvature;
thence along the arc of a curve to the right having a central angle of 71°39'12", a radius of 380.00 feet, an arc length of 475.22 feet and whose chord bears North 32°16'58" West a distance of 444.85 feet to a point on the southerly line of 11th Avenue;
thence South 89°52'56" East, along said southerly line, a distance of 506.86 feet to the **Point of Beginning;**

Containing 495,994 square feet or 11.386 acres, more or less.

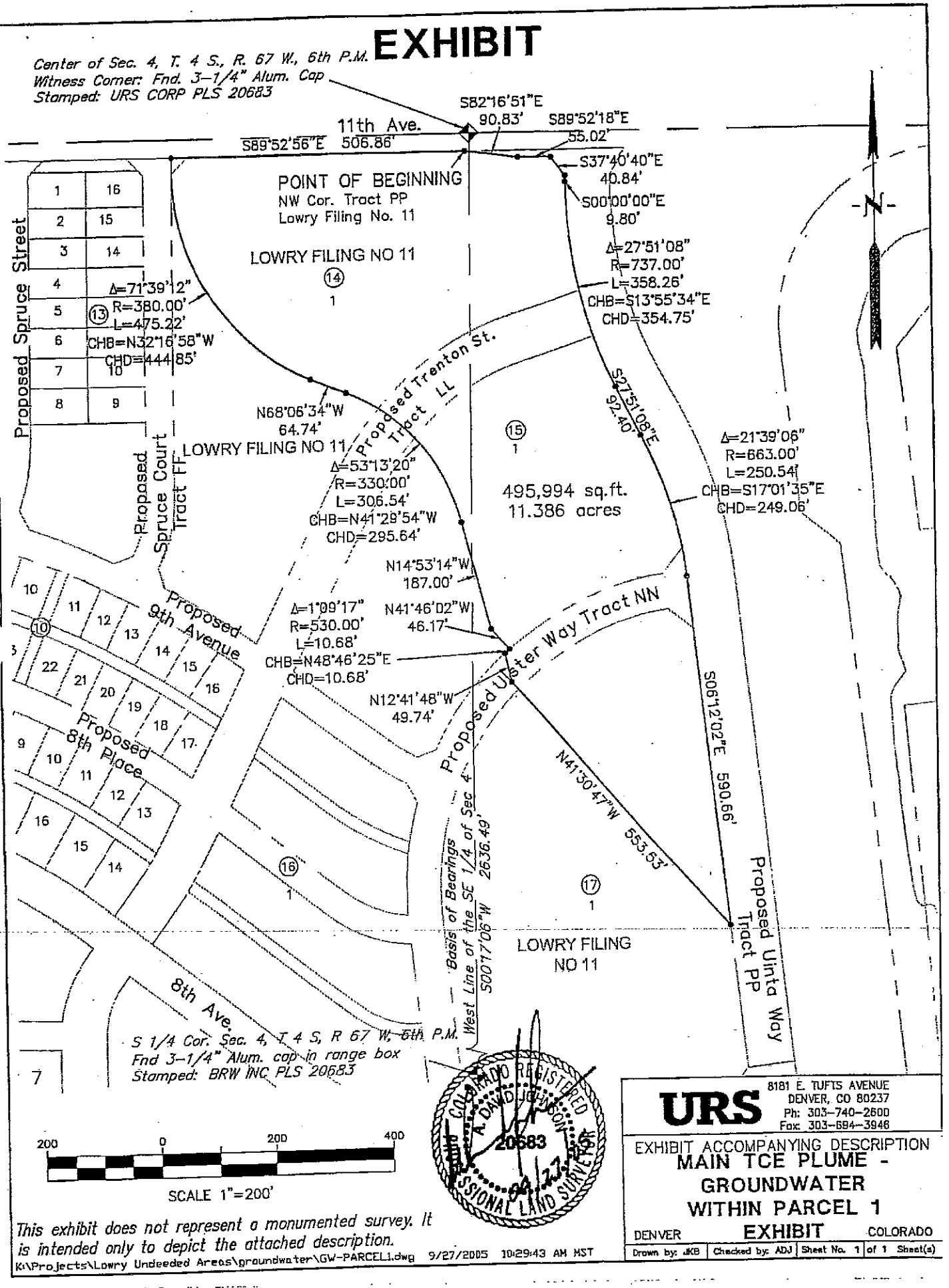
Basis of Bearings: Bearings are based on the west line of the Southeast Quarter of Section 4, Township 4 South, Range 67 West of the 6th Principal Meridian, as bearing South 00°17'06' West. The bearing of said west line is shown on the City and County of Denver Lowry Air Force Base Boundary Survey under project No. 94-576, dated April 09, 1996 and filed in Book 23 of the County Surveyor's Land Survey/Right of Way Surveys at Pages 102-103. The Center of said Section 4 is a 3-1/4" aluminum cap stamped Witness Corner URS CORP. PLS 20683 and the South Quarter Corner of said Section 4 is marked by a 3-1/4" aluminum cap in a range box stamped BRW INC. PLS 20683.

09/27/05

A. Da[illegible], P.L.S. 20683
For and on behalf of URS Corp.
8181 E[illegible] Ave.
Denver, [illegible]
Ph. 303.740.2698

K:\LEGALS\Lowry\Lowry Undeeded Areas\GROUNDWATER\GW-PARCEL 1.doc
9/27/2005 9:15 AM

EXHIBIT



COLORADO REGISTERED A. DAVID JOHNSON 20683 PROFESSIONAL LAND SURVEYOR

This exhibit does not represent a monumented survey. It is intended only to depict the attached description.

K:\Projects\Lowry Undeeded Areas\groundwater\GW-PARCEL1.dwg 9/27/2005 10:29:43 AM MST

URS
8181 E. TUFTS AVENUE
DENVER, CO 80237
Ph: 303-740-2600
Fax: 303-694-3946

EXHIBIT ACCOMPANYING DESCRIPTION

MAIN TCE PLUME - GROUNDWATER WITHIN PARCEL 1

DENVER **EXHIBIT** COLORADO

Drawn by: JKB	Checked by: ADJ	Sheet No. 1	of 1 Sheet(s)

DESCRIPTION
Headquarters TCE Plume - Groundwater
within Parcel 3

A part of the Northwest Quarter of Section 9, Township 4 South, Range 67 West of the Sixth Principal Meridian, City and County of Denver, State of Colorado being more particularly described as follows:

COMMENCING at the West Quarter Corner of said Section 9;
thence North 00°10'10" East, along the west line of the Northwest Quarter of said Section 9, a distance of 935.70 feet;
thence South 89°49'50"East a distance of 30.00 feet to the easterly line of Quebec Street and the **POINT OF BEGINNING;**
thence North 00°10'10" East, along said easterly line, a distance of 1113.68 feet;
thence South 13°49'28" East a distance of 473.61 feet;
thence South 28°27'35" East a distance of 470.61 feet;
thence South 40°15'22" East a distance of 73.41 feet;
thence South 58°45'15" East a distance of 141.25 feet;
thence South 31°26'51" East a distance of 90.93 feet;
thence South 51°08'07" East a distance of 171.71 feet;
thence South 38°02'18" East a distance of 601.93 feet;
thence South 53°55'48" West a distance of 474.80 feet to a point of curvature;
thence along the arc of a curve to the right having a central angle of 89°31'23", a radius of 220.00 feet, an arc length of 343.74 feet and whose chord bears North 81°18'31" West a distance of 309.83 feet to a point of non-tangency;
thence North 00°55'29" East a distance of 267.24 feet;
thence North 24°03'33" West a distance of 306.79 feet;
thence North 08°45'08" West a distance of 113.37 feet;
thence North 26°34'52" West a distance of 67.47 feet;
thence North 86°03'27" West a distance of 125.37 feet to a point of non-tangent curvature;
thence along the arc of a curve to the right having a central angle of 42°23'49", a radius of 130.00 feet, an arc length of 96.20 feet and whose chord bears North 55°40'35" West a distance of 94.02 feet to the **POINT OF BEGINNING;**

Containing 698,912 square feet or 16.045 acres, more or less.

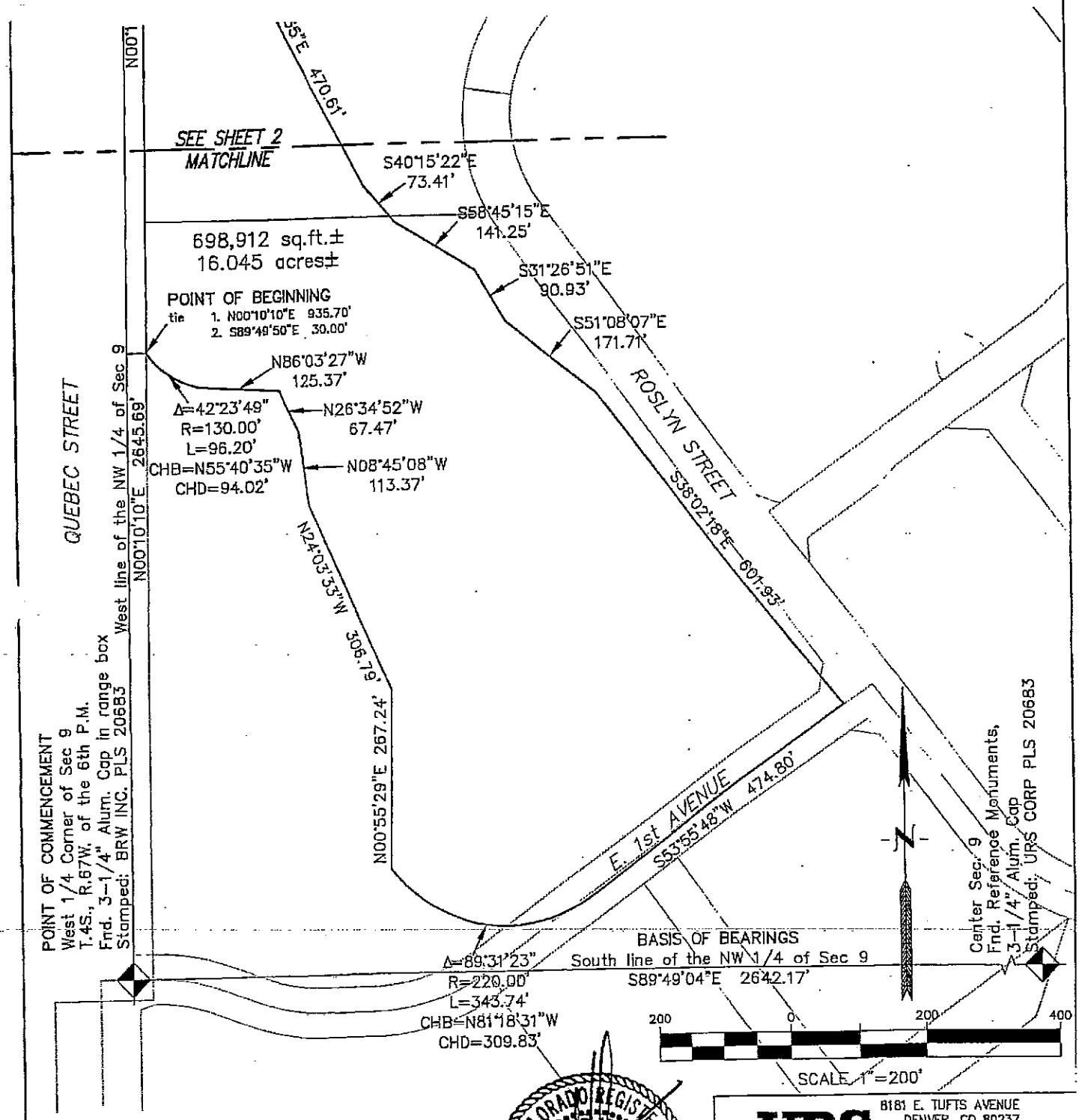
Basis of Bearings: Bearings are based on the south line of the Northwest Quarter of Section 9, Township 4 South, Range 67 West of the 6th Principal Meridian as being S89°49'04"E. The bearing of said south line is shown on the City and County of Denver Lowry Air Force Base Boundary Survey under Project No. 94-576, dated 04/09/96 and recorded in Book 23 of the County Surveyor's Land Survey/Right of Way Surveys at Pages 102-103. The Center Quarter Corner of Section 9 is marked by reference monuments, found 3-1/4" aluminum caps stamped URS CORP PLS 20683. The West Quarter Corner of Section 9 is a found 3-1/4" aluminum cap in range box stamped BRW INC. PLS 20683.

09/27/05

A. David Johnson, P.L.S. 20683
For and on behalf of URS Corp.
8181 E. Tufts Ave.
Denver, CO 80237
Ph. 303.740.2600

K:\LEGALS\Lowry\Lowry Undeeded Areas\GROUNDWATER\GW-PARCEL 3.doc
9/27/2005 9:11 AM

EXHIBIT



COLORADO REGISTERED LAND SURVEYOR 20683 PROFESSIONAL LAND SURVEYOR 09 27 05

This exhibit does not represent a monumented survey. It is intended only to depict the attached description.

K:\Projects\Loary Unleased Areas\groundwater\GW-PARCEL3.dwg 9/23/2005 3:02:17 PM MDT

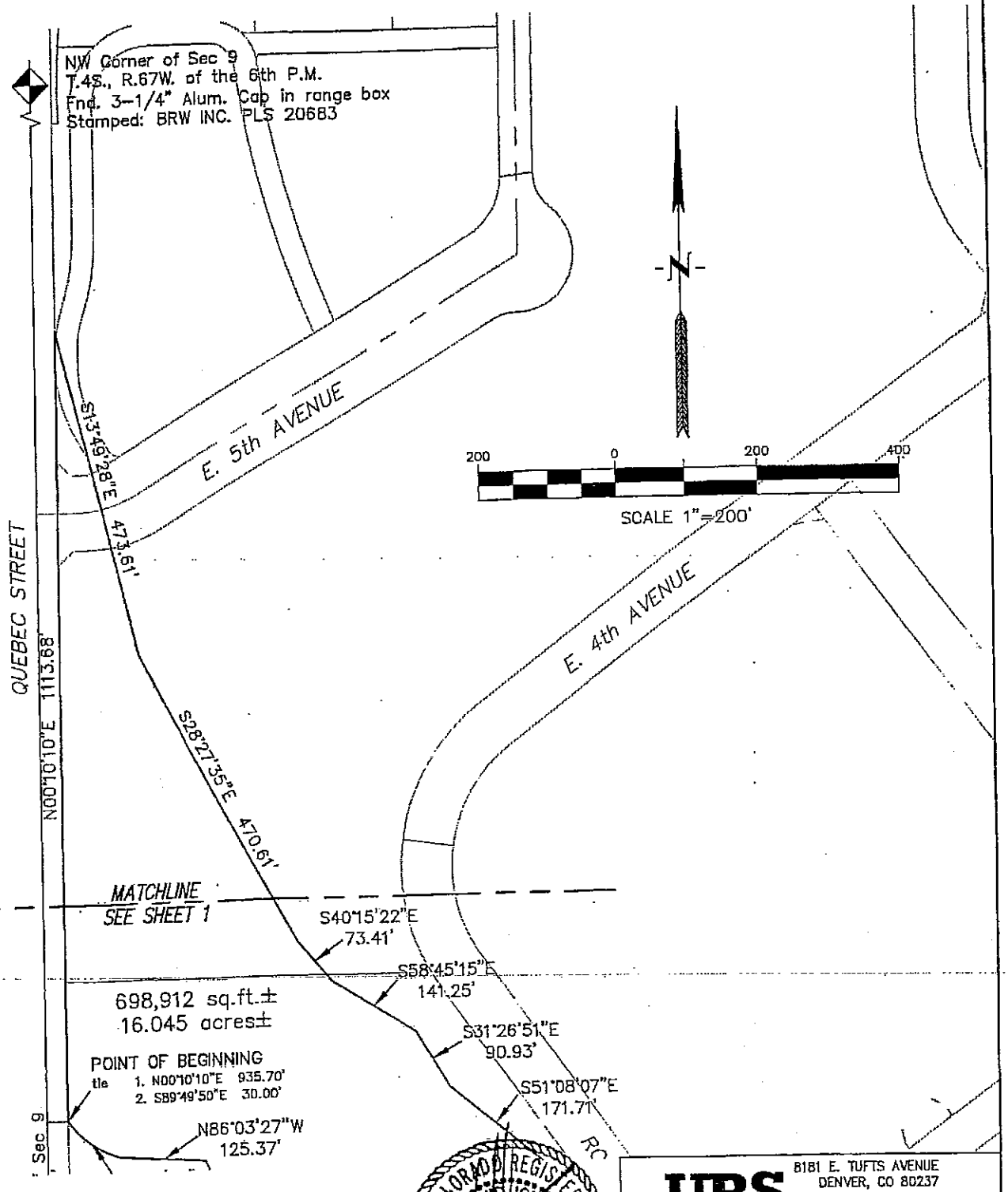
URS
8181 E. TUFTS AVENUE
DENVER, CO 80237
Ph: 303-740-2600
Fax: 303-694-3946

EXHIBIT ACCOMPANYING DESCRIPTION
HEADQUARTERS TCE
PLUME - GROUNDWATER
WITHIN PARCEL 3

DENVER **EXHIBIT** COLORADO

Drawn by: JKB	Checked by: ADJ	Sheet No. 1	of 2 Sheet(s)

EXHIBIT



This exhibit does not represent a monumented survey. It is intended only to depict the attached description.

K:\Projects\Lowry Undeeded Areas\groundwater\GW-PARCEL3.dwg 9/23/2005 3:02:17 PM MST

URS
8181 E. TUFTS AVENUE
DENVER, CO 80237
Ph: 303-740-2600
Fax: 303-694-3946

EXHIBIT ACCOMPANYING DESCRIPTION
HEADQUARTERS TCE
PLUME - GROUNDWATER
WITHIN PARCEL 3

DENVER **EXHIBIT** COLORADO

Drawn by: JKB	Checked by: ADJ	Sheet No. 2	of 2 Sheet(s)

DESCRIPTION
Main TCE Plume - Groundwater
Parcel 4(A)

A part of the Southwest Quarter of Section 4, a part of the Southeast Quarter of Section 4 and a part of the Northeast Quarter of Section 9, Township 4 South, Range 67 West of the Sixth Principal Meridian, City and County of Denver, State of Colorado being more particularly described as follows:

COMMENCING at the East Quarter Corner of said Section 4;
thence North 89°52'18" West, along the north line of said Southeast Quarter, a distance of 2370.92 feet;
thence South 00°07'42" West a distance of 30.00 feet to the Northeast corner of Lowry Filing No. 11 of said City and County of Denver and the **POINT OF BEGINNING;**
thence South 89°52'18" East, along the southerly line of 11th Avenue, a distance of 89.47 feet;
thence South 23°44'40" East a distance of 769.35 feet;
thence South 72°21'45" East a distance of 501.04 feet;
thence South 25°49'44" East a distance of 631.58 feet to a point on the westerly line of Area 20b described at Reception Number 2002206861 in the Clerk and Recorders Office of said City and County of Denver;
thence South 15°28'41" West, along said westerly line of Area 20b, a distance of 151.29 feet to a point of non-tangent curvature on the northerly line of a Parcel of Land described at Reception Number 2000137528 in said Clerk and Recorders Office;

thence along the northerly and westerly line of said Parcel of Land the following three (3) courses:

1. along the arc of a curve to the left having a central angle of 03°25'42", a radius of 712.50 feet, an arc length of 42.63 feet and whose chord bears South 70°11'49" West a distance of 42.63 feet;
2. South 34°56'25" West a distance of 130.51 feet;
3. South 06°15'42" East a distance of 825.13 feet to the southwest corner of said Parcel of Land;

thence South 06°15'42" East a distance of 201.30 feet to the southwest corner of said Parcel 6-D-1 described at Reception Number 9700003185 in said Clerk and Recorders Office;
thence South 89°44'10" East, along the southerly line of said Parcel 6-D-1, a distance of 212.01 feet to a point that is 1038.73 feet west of the east line of said Northeast Quarter;
thence South 00°04'42" West a distance of 502.15 feet to a point that is 1039.24 feet west of said east line of the Northeast Quarter and on the northerly line of Area 3 described at Reception Number 9800174373 in said Clerk and Recorders Office;
thence North 89°44'58" West, along said northerly line, a distance of 431.06 feet to a point on the easterly line of Area 2 described at Reception Number 9800087078 in said Clerk and Recorders Office;

thence along said easterly and northerly line of said Area 2 the following two (2) courses:

1. North 00°19'49" West a distance of 130.06 feet;
2. North 89°57'23" West a distance of 91.72 feet to the southeast corner of Parcel 1, Area 7 described at Reception Number 9900183842 in said Clerk and Recorders Office;

thence along the northerly and easterly line of said Parcel 1, Area 7 the following seven (7) courses:

1. North 00°00'00" West a distance of 87.47 feet;
2. North 50°16'15" West a distance of 238.52 feet;
3. North 40°45'51" West a distance of 165.09 feet;
4. North 03°40'12" West a distance of 150.35 feet;
5. North 19°29'51" East a distance of 132.64 feet;
6. North 24°50'04" West a distance of 162.56 feet;
7. North 89°36'09" West a distance of 210.32 feet to a point on the westerly line of Tract G of Lowry Filing No. 9 of said City and County of Denver;

thence along said westerly line of Tract G the following three (3) courses:

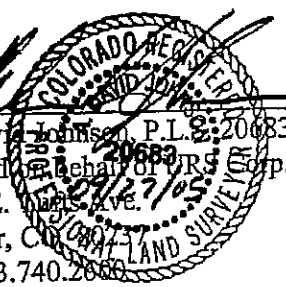
1. North 00°28'46" East a distance of 12.84 feet to a point of curvature;
2. along the arc of a curve to the left having a central angle of 08°45'59", a radius of 734.75 feet, an arc length of 112.42 feet and whose chord bears North 03°54'13" West a distance of 112.31 feet;
3. North 06°12'02" West a distance of 630.98 feet to the southwest corner of Tract PP of said Lowry Filing No. 11;

thence along the westerly and northerly line of said Tract PP the following ten (10) courses:

1. North 06°12'02" West a distance of 829.04 feet to a point of curvature;
2. along the arc of a curve to the left having a central angle of 21°39'06", a radius of 663.00 feet, an arc length of 250.54 feet and whose chord bears North 17°01'35" West a distance of 249.06 feet;
3. North 27°51'08" West a distance of 92.40 feet to a point of curvature;
4. along the arc of a curve to the right having a central angle of 27°51'08", a radius of 737.00 feet, an arc length of 358.26 feet and whose chord bears North 13°55'34" West a distance of 354.75 feet;
5. North 00°00'00" West a distance of 9.80 feet;
6. North 37°40'40" West a distance of 40.84 feet;
7. North 89°52'18" West a distance of 55.02 feet:
8. North 82°16'51" West a distance of 90.83 feet to the northwest corner of said Tract PP;
9. South 89°52'56" East a distance of 6.99 feet;
10. South 89°52'18" East a distance of 268.42 feet to the **POINT OF BEGINNING**;

Containing 2,027,363 square feet or 46.542 acres, more or less.

BASIS OF BEARINGS: Bearings are based on the east line of the Southeast Quarter of Section 4, Township 4 South, Range 67 West of the Sixth Principal Meridian as being North 00°15'02" East. The bearing of said east line is shown on the City and County of Denver Lowry Air Force Base Boundary Survey under Project No. 94-576, dated 4/09/96 and filed in Book 23 of the County Surveyor's Land Survey/Right of Way Surveys at Pages 102-103. The East Quarter Corner of Section 4 is a found 3" brass cap in range box stamped LS 16419 and the Southeast Corner of Section 4 is a 3 1/4" aluminum cap in range box stamped URS CORP PLS 20683.

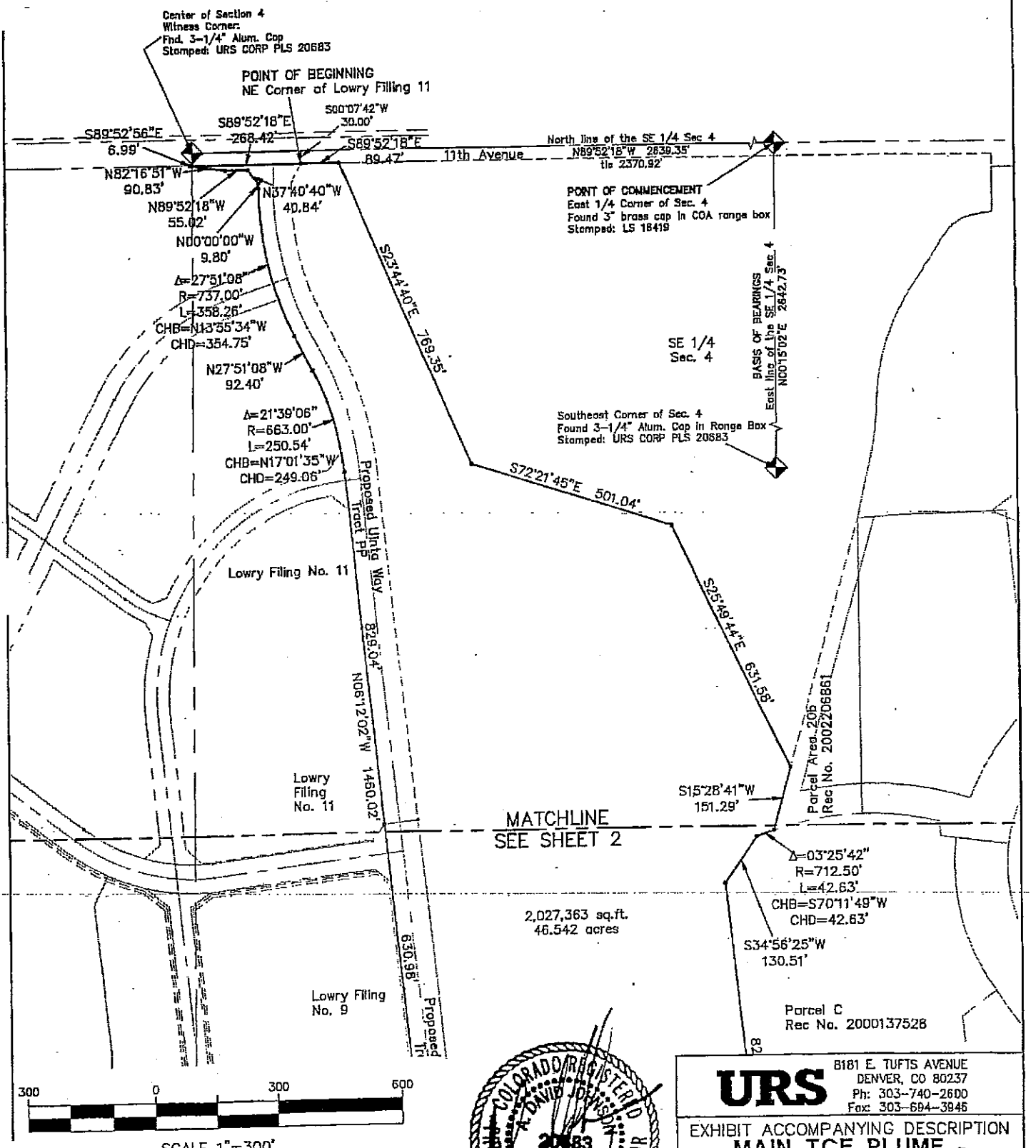


09/27/05

A. David Johnsen, P.L.S. 20683
For and on behalf of URS Corp.
8181 E. Haets. Ave.
Denver, CO 80237
Ph. 303.740.2666

K:\LEGALS\Lowry\Lowry Undeeded Areas\GROUNDWATER\GW-PARCEL 4(A).doc
9/27/2005 9:13 AM

EXHIBIT



This exhibit does not represent a monumented survey. It is intended only to depict the attached description.

L:\Projects\Lowry Undeeded Areas\groundwater\GW-PARCEL4(A).dwg 9/23/2005 3:09:50 PM MST

URS
8181 E. TUFTS AVENUE
DENVER, CO 80237
Ph: 303-740-2600
Fax: 303-694-3946

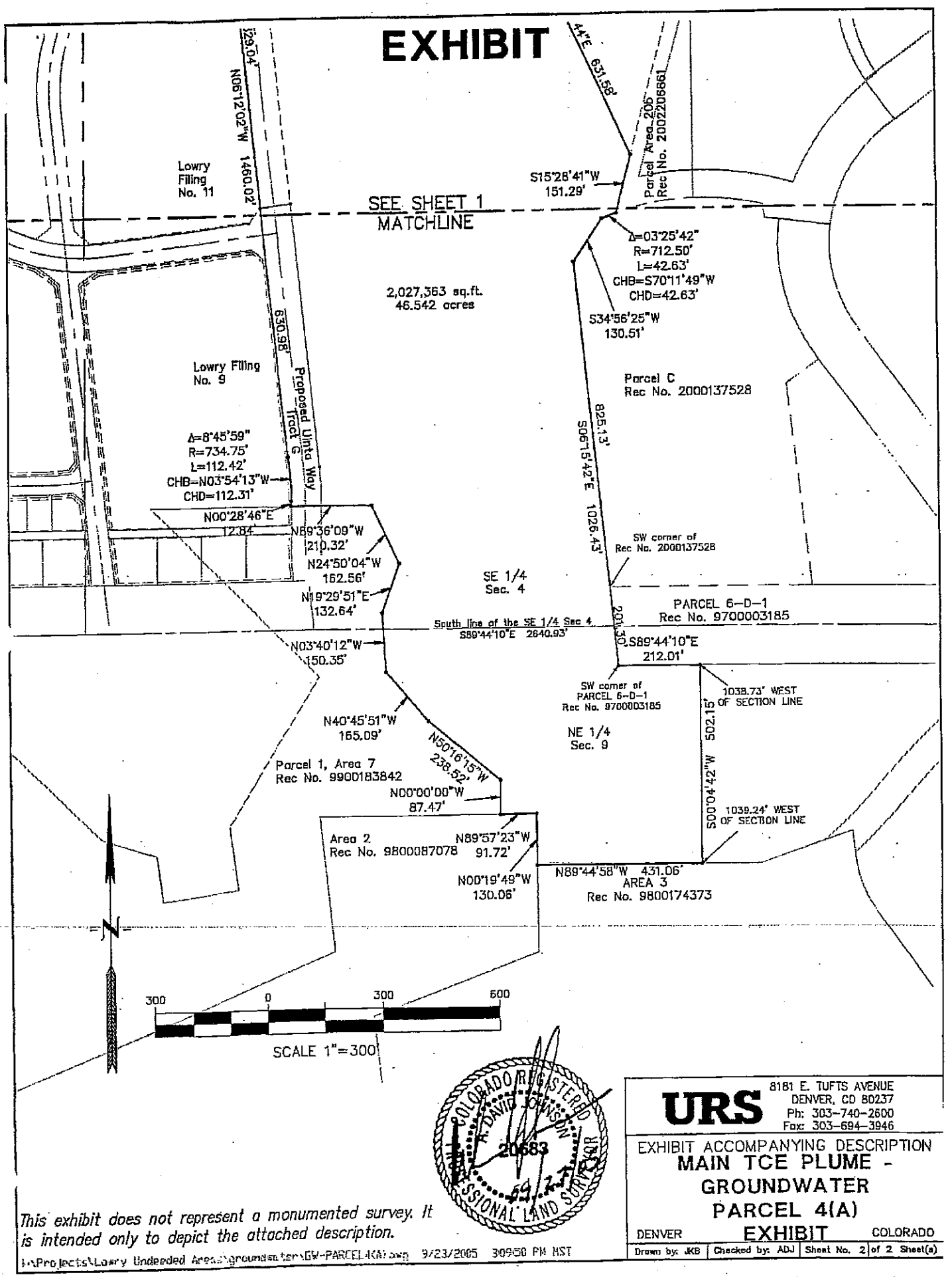
EXHIBIT ACCOMPANYING DESCRIPTION

MAIN TCE PLUME - GROUNDWATER PARCEL 4(A)

DENVER **EXHIBIT** COLORADO

Drawn by: JKB	Checked by: ADJ	Sheet No. 1	of 2 Sheet(s)

EXHIBIT



COLORADO REGISTERED F. DAVID JOHNSON 20683 PROFESSIONAL LAND SURVEYOR

This exhibit does not represent a monumented survey. It is intended only to depict the attached description.

I:\Projects\Lowry Undeeded Areas\groundwater\GW-PARCEL4(A).dwg 9/23/2005 3:09:50 PM MST

URS
8181 E. TUFTS AVENUE
DENVER, CO 80237
Ph: 303-740-2600
Fax: 303-694-3946

EXHIBIT ACCOMPANYING DESCRIPTION

MAIN TCE PLUME - GROUNDWATER

PARCEL 4(A)

DENVER **EXHIBIT** COLORADO

Drawn by: JKB	Checked by: ADJ	Sheet No. 2 of 2 Sheet(s)

DESCRIPTION
Main TCE Plume - Groundwater
within Parcel 4(B)

A part of the Southeast Quarter of Section 4, a part of the Northeast Quarter of Section 9, and a part of the Northwest Quarter of Section 10, Township 4 South, Range 67 West of the Sixth Principal Meridian, City and County of Denver, State of Colorado, being more particularly described as follows:

COMMENCING at the South Quarter Corner of said Section 10;
thence North 01°41'44" West a distance of 2461.64 feet;
thence North 60°17'45" West a distance of 885.52 feet to a point of non-tangent curvature and the **POINT OF BEGINNING**;
thence along the arc of a curve to the right having a central angle of 72°43'25", a radius of 150.00 feet, an arc length of 190.39 feet and whose chord bears North 79°40'27" West a distance of 177.86 feet;
thence North 43°18'45" West a distance of 343.85 feet;
thence North 40°43'41" West a distance of 761.58 feet;
thence North 35°04'31" West a distance of 417.42 feet;
thence North 39°16'25" West a distance of 600.98 feet to a point on the southeasterly line of said "Parcel ROW-2" described at Reception Number 9700003186 in the Clerk and Recorders Office of said City and County of Denver;
thence South 53°24'05" West, along said southeasterly line, a distance of 58.18 feet;
thence North 43°35'10" West a distance of 146.09 feet to a point on a northwesterly line of said "Parcel ROW-2";
thence North 52°26'55" West a distance of 623.56 feet to a point on a southeasterly line of said "Parcel ROW-2";
thence North 41°13'02" West a distance of 75.00 feet to a point on a northwesterly line of said "Parcel ROW-2";
thence North 45°55'58" West a distance of 470.27 feet to the southeast corner of a Parcel of Land described at Reception Number 2000137528 in said Clerk and Recorder's Office;

thence along the easterly line of said Parcel of Land the following two (2) courses:

1. North 06°28'20" West a distance of 513.70 feet;
2. North 53°30'13" East a distance of 99.85 feet to a point on a southwesterly line of said "Parcel ROW-2";

thence South 36°29'47" East, along said southwesterly line, a distance of 128.17 feet;
thence South 90°00'00" East a distance of 155.49 feet to a point on the southwesterly line of a parcel of land described at Reception Number 2000144000 in said Clerk and Recorder's Office;
thence South 36°29'47" East, along said southwesterly line, a distance of 704.82 feet to the most westerly corner of a parcel of land described at Reception Number 2005009025 in said Clerk and Recorder's Office;

thence along the southwesterly and southeasterly lines of said parcel the following two (2) courses:

1. South 57°31'52" East a distance of 703.51 feet;
2. North 53°24'05" East a distance of 68.43 feet;

thence South 64°33'43" East a distance of 156.02 feet to a point on the southwesterly line of Tract B, Lowry Filing No. 14 of said City and County of Denver;
thence South 53°27'42" West, along said southwesterly line, a distance of 58.01 feet;
thence South 36°17'24" East a distance of 381.43 feet;
thence South 17°56'49" East a distance of 238.64 feet;
thence South 32°44'51" East a distance of 356.26 feet;
thence South 67°06'32" East a distance of 309.90 feet;
thence North 82°51'23" East a distance of 511.06 feet;
thence South 38°32'02" East a distance of 355.36 feet;
thence North 55°13'32" East a distance of 139.45 feet;
thence along the arc of a curve to the right having a central angle of 72°03'49", a radius of 380.00 feet, an arc length of 477.94 feet and whose chord bears South 07°29'33" West a distance of 447.06 feet;
thence South 43°31'28" West a distance of 549.19 feet to a point of curvature;
thence along the arc of a curve to the right having a central angle of 20°26'22", a radius of 150.00 feet, an arc length of 53.51 feet and whose chord bears South 53°44'39" West a distance of 53.23 feet to the **POINT OF BEGINNING**;

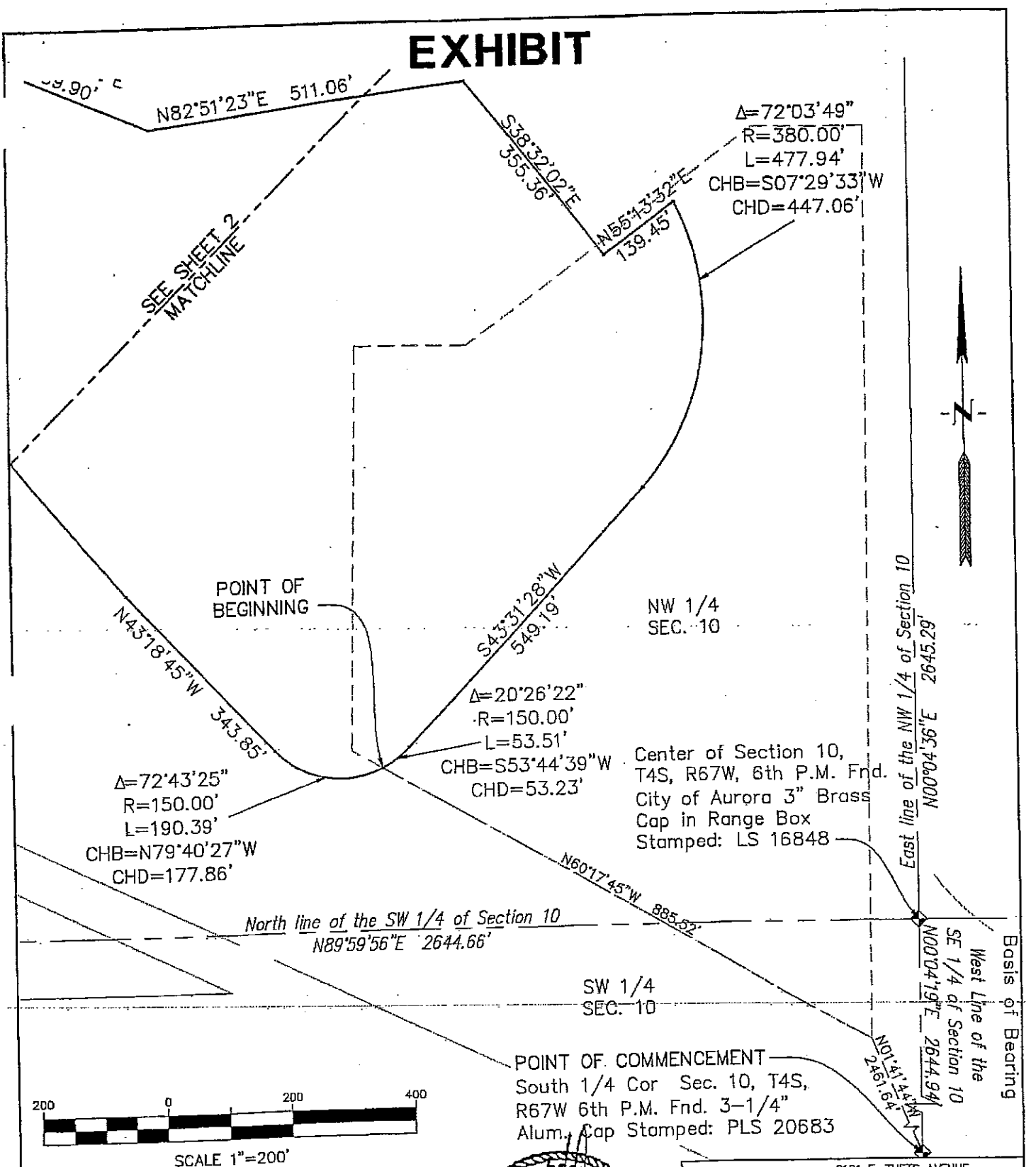
Containing 2,111,340 square feet or 48.470 acres, more or less.

Basis of Bearings: Bearings are based on the west line of the Southeast Quarter of Section 10, Township 4 South, Range 67 West of the Sixth Principal Meridian as being North 00°04'19" East. The bearing of said line is shown on the City and County of Denver Lowry Air Force Base Boundary Survey under Project No. 94-576, dated 4/09/96 and filed in Book 23 of the County Surveyor's Land Survey/Right of Way Surveys at Pages 102-103. The South Quarter corner of Section 10 is a found 3-1/4" Aluminum cap Stamped URS CORP PLS 20683 and the Center Quarter corner of Section 10 is a found 3" brass cap stamped PLS 16848 in a range box.

9/27/05

A. David Johnson, P.L.S. 20683
For and on behalf of URS CORP
8181 E. Tufts Ave.
Denver, CO 80237
Ph. 303.740.2600 Fax 303.694.2770
K:\LEGALS\Lowry\Lowry Undeeded Areas\GROUNDWATER\GW-PARCEL 4(B).doc
9/27/2005 1:12 PM

EXHIBIT



COLORADO REGISTERED A. DAVID JOHNSON 20683 PROFESSIONAL LAND SURVEYOR

This exhibit does not represent a monumented survey. It is intended only to depict the attached description.

K:\Projects\Lowry Undeeded Areas\groundwater\GW-PARCEL4(B).dwg 9/27/2005 10:10:59 AM MST

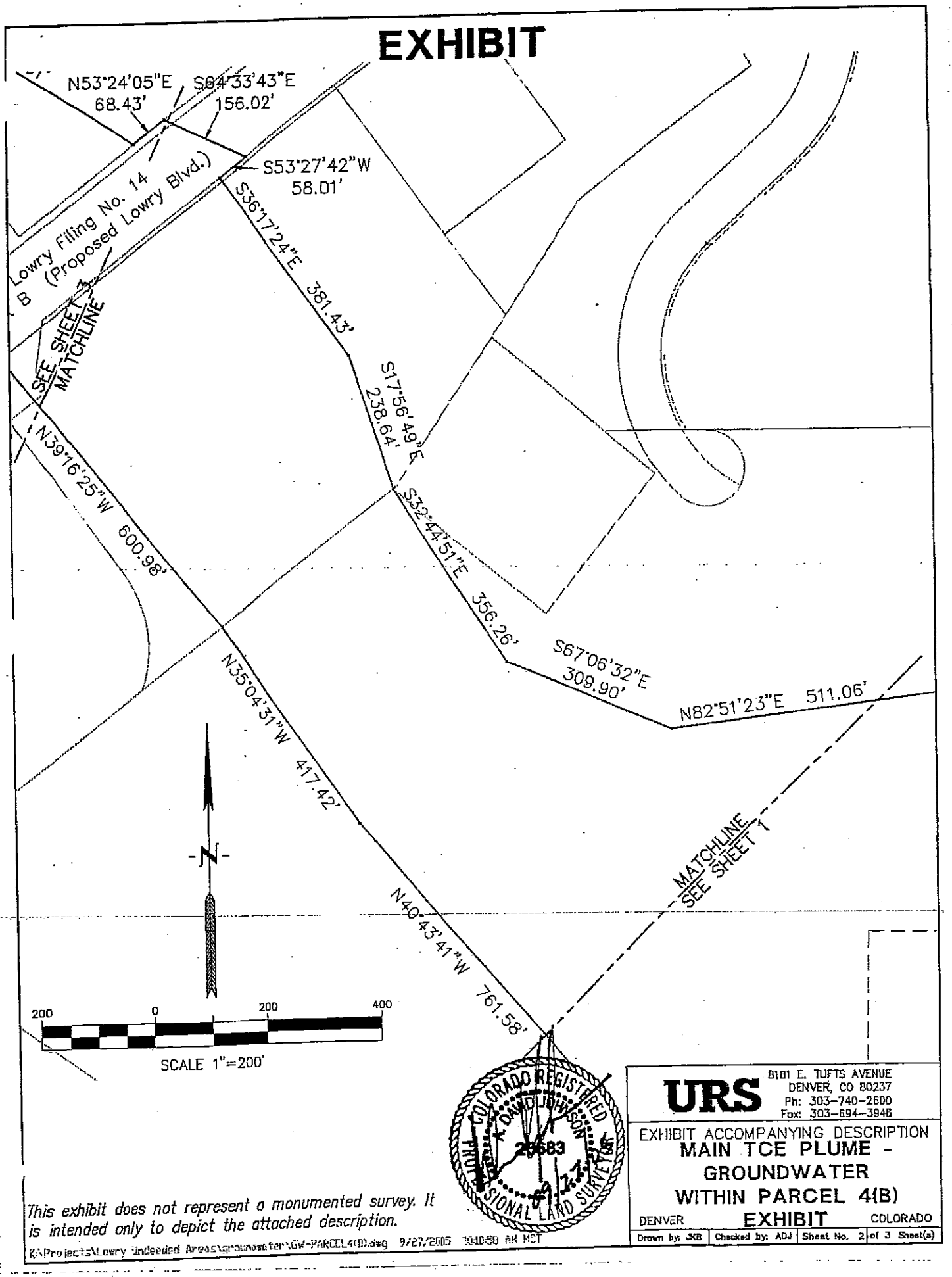
URS
8181 E. TUFTS AVENUE
DENVER, CO 80237
Ph: 303-740-2600
Fax: 303-694-3946

EXHIBIT ACCOMPANYING DESCRIPTION
MAIN TCE PLUME - GROUNDWATER WITHIN PARCEL 4(B)

DENVER **EXHIBIT** COLORADO

Drawn by: JKB	Checked by: ADJ	Sheet No. 1	of 3 Sheet(s)

EXHIBIT



COLORADO REGISTERED
J. DAVID JOHNSON
20683
PROFESSIONAL LAND SURVEYOR
9-11-05

This exhibit does not represent a monumented survey. It is intended only to depict the attached description.

K:\Projects\Lowry Indeeded Areas\groundwater\GW-PARCEL4(B).dwg 9/27/2005 10:10:58 AM MST

URS
8181 E. TUFTS AVENUE
DENVER, CO 80237
Ph: 303-740-2600
Fax: 303-694-3946

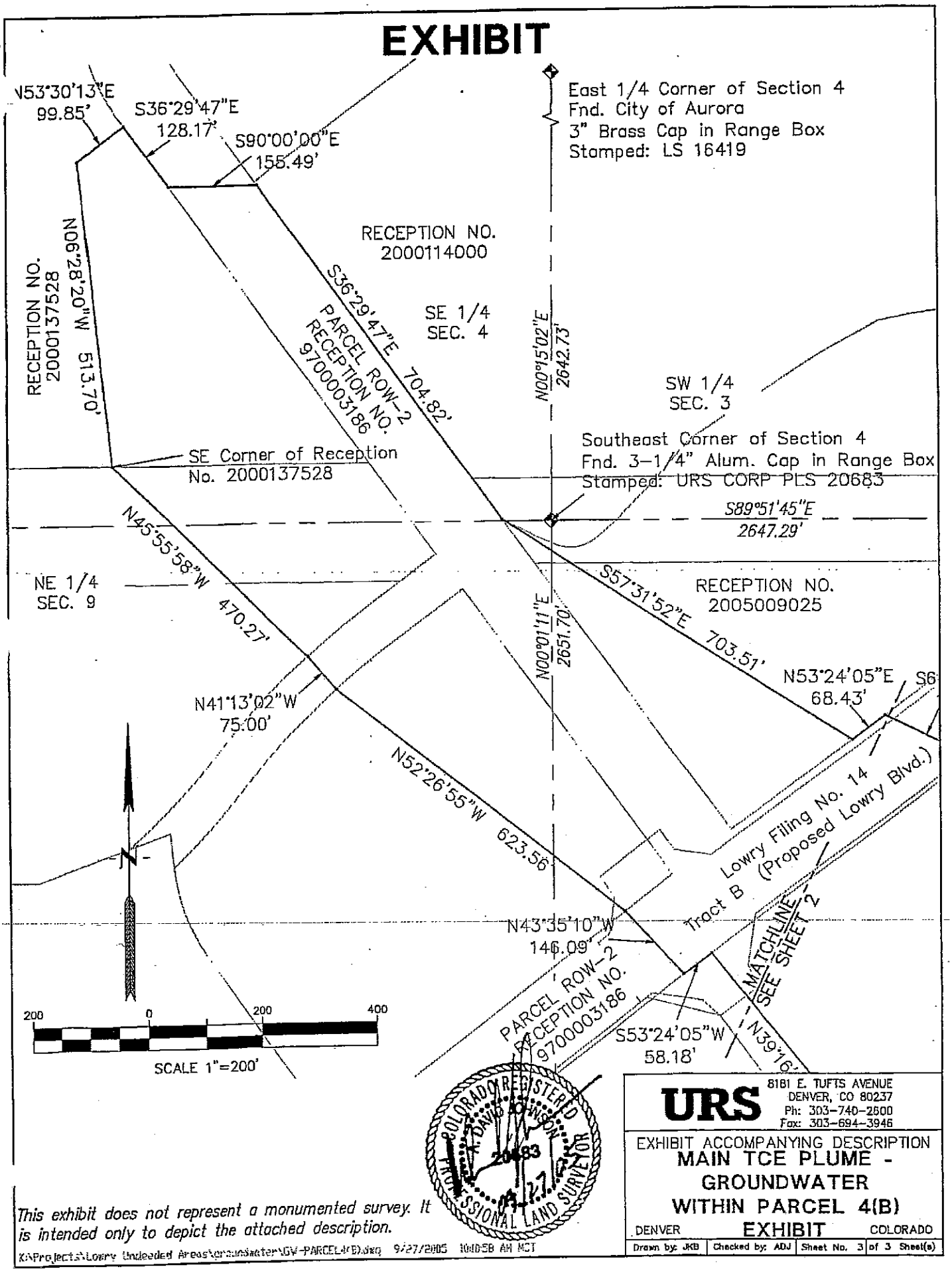
EXHIBIT ACCOMPANYING DESCRIPTION

MAIN TCE PLUME - GROUNDWATER WITHIN PARCEL 4(B)

DENVER **EXHIBIT** COLORADO

Drawn by: JKB	Checked by: ADJ	Sheet No. 2	of 3 Sheet(s)

EXHIBIT



COLORADO REGISTERED
J. DAVID JOHNSON
20683
PROFESSIONAL LAND SURVEYOR

This exhibit does not represent a monumented survey. It is intended only to depict the attached description.

K:\Projects\Lowry Undeeded Areas\groundwater\GW-PARCEL4(B).dwg 9/27/2005 10:05:58 AM MST

URS
8181 E. TUFTS AVENUE
DENVER, CO 80237
Ph: 303-740-2600
Fax: 303-694-3946

EXHIBIT ACCOMPANYING DESCRIPTION

MAIN TCE PLUME - GROUNDWATER WITHIN PARCEL 4(B)

DENVER **EXHIBIT** COLORADO

Drawn by: JKB	Checked by: ADJ	Sheet No. 3	of 3 Sheet(s)

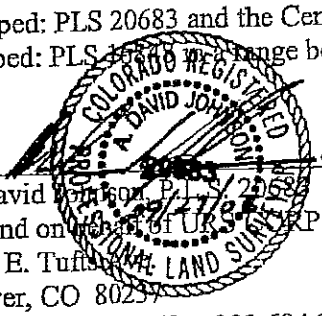
DESCRIPTION
TCE 1 – Groundwater
within Parcel 5(A)

A part of the Southeast Quarter of Section 10, Township 4 South, Range 67 West of the Sixth Principal Meridian, City and County of Denver and County of Arapahoe, State of Colorado, being more particularly described as follows:

COMMENCING at the South Quarter Corner of said Section 10;
thence North 21°56'56" East a distance of 2734.35 feet to the **POINT OF BEGINNING;**
thence South 89°58'34" East a distance of 650.94 feet to a point of non-tangent curvature;
thence along the arc of a curve to the right having a central angle of 193°34'14", a radius of 327.76 feet, an arc length of 1107.34 feet and whose chord bears North 89°58'34" West, a distance of 650.94 feet to the **POINT OF BEGINNING;**

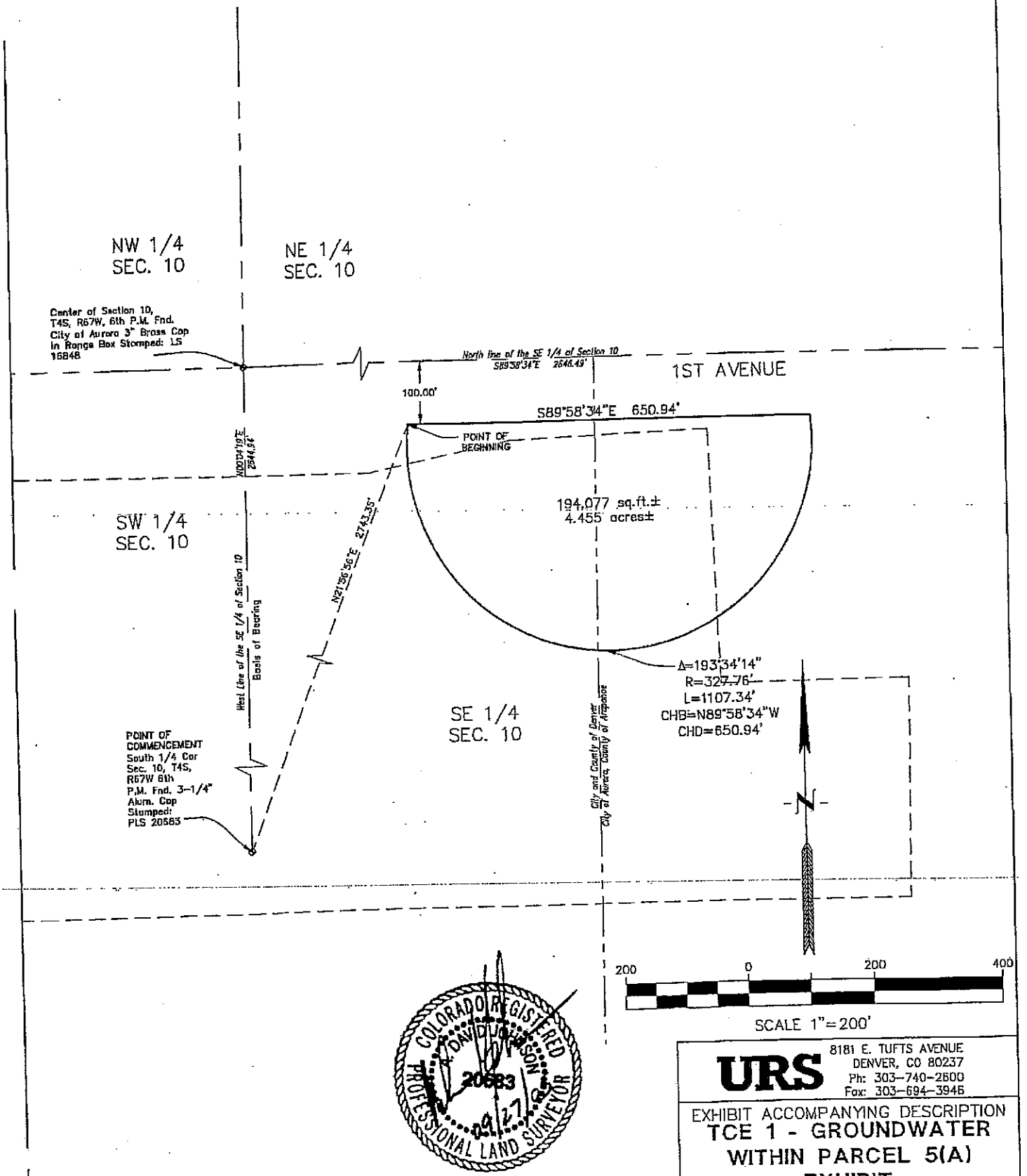
Containing 194,077 square feet or 4.455 acres, more or less.

Basis of Bearings: Bearings are based on the west line of the Southeast Quarter of Section 10, Township 4 South, Range 67 West of the Sixth Principal Meridian as being North 00°04'19" East. The bearing of said line is shown on the City and County of Denver Lowry Air Force Base Boundary Survey under Project No. 94-576, dated 4/09/96 and filed in Book 23 of the County Surveyor's Land Survey/Right of Way Surveys at Pages 102-103. The South Quarter corner of Section 10 is a found 3-1/4" Aluminum cap Stamped: PLS 20683 and the Center Quarter corner of Section 10 is a found 3" brass cap stamped: PLS [illegible] in a range box.



A. David Johnson, P.L.S. 20683
For and on behalf of URS Corp
8181 E. Tufts Ave.
Denver, CO 80237
Ph. 303.740.2600 Fax 303.694.2770
K:\LEGALS\Lowry\Lowry Undeeded Areas\GROUNDWATER\GW-TCE-1.doc
9/26/2005 4:26 PM

EXHIBIT



This exhibit does not represent a monumented survey. It is intended only to depict the attached description.

K:\Projects\Lowry Undeeded Areas\groundwater\GW-TCE-1.dwg 9/26/2005 4:27:13 PM MDT

URS
8181 E. TUFTS AVENUE
DENVER, CO 80237
Ph: 303-740-2600
Fax: 303-694-3946

EXHIBIT ACCOMPANYING DESCRIPTION
TCE 1 - GROUNDWATER WITHIN PARCEL 5(A)
EXHIBIT

DENVER COLORADO

Drawn by: JKB	Checked by: ADJ	Sheet No. 1 of 1 Sheet(s)

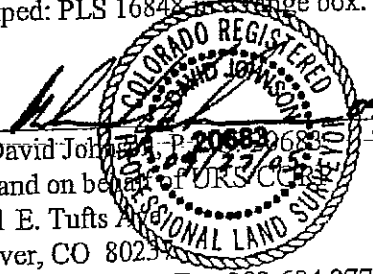
DESCRIPTION
TCE 2 – Groundwater
within Parcel 5(A)

A part of the South Half of Section 10, Township 4 South, Range 67 West of the Sixth Principal Meridian, City and County of Denver, State of Colorado, being more particularly described as follows:

COMMENCING at the South Quarter Corner of said Section 10;
thence North 03°28'49" East a distance of 1529.38 feet to the **POINT OF BEGINNING;**
thence North 07°27'06" West a distance of 209.15 feet;
thence North 73°06'50" West a distance of 314.13 feet;
thence North 01°16'53" West a distance of 157.04 feet to a point of non-tangent curvature;
thence along the arc of a curve to the right having a central angle of 89°07'05", a radius of 686.75 feet, an arc length of 1068.17 feet and whose chord bears North 84°37'41" East, a distance of 963.71 feet to a point of non-tangency;
thence South 01°06'53" East a distance of 205.03 feet to a point of non-tangent curvature;
thence along the arc of a curve to the right having a central angle of 67°52'09", a radius of 430.70 feet, an arc length of 510.19 feet and whose chord bears South 45°32'39" West, a distance of 480.88 feet to a point of non-tangency;
thence South 89°11'29" West a distance of 289.02 feet to the **POINT OF BEGINNING;**

Containing 497,192 square feet or 11.414 acres, more or less.

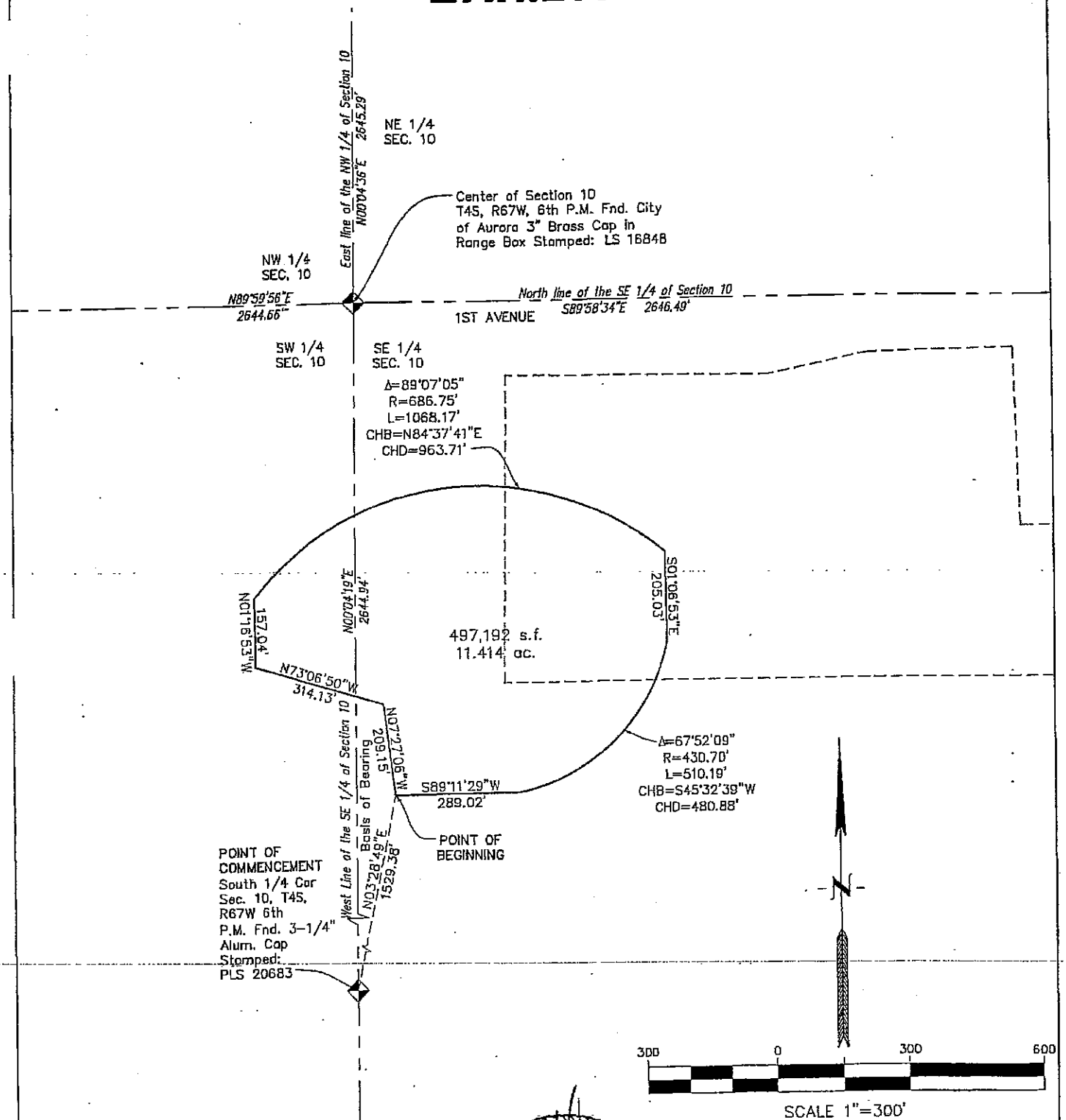
Basis of Bearings: Bearings are based on the west line of the Southeast Quarter of Section 10, Township 4 South, Range 67 West of the Sixth Principal Meridian as being North 00°04'19" East. The bearing of said line is shown on the City and County of Denver Lowry Air Force Base Boundary Survey under Project No. 94-576, dated 4/09/96 and filed in Book 23 of the County Surveyor's Land Survey/Right of Way Surveys at Pages 102-103. The South Quarter corner of Section 10 is a found 3-1/4" Aluminum cap Stamped: PLS 20683 and the Center Quarter corner of Section 10 is a found 3" brass cap stamped: PLS 16848 in a range box.



9/27/05

A. David Johnson, P.L.S. 20683
For and on behalf of URS Corp.
8181 E. Tufts Ave.
Denver, CO 80237
Ph. 303.740.2600 Fax 303.694.2770
K:\LEGALS\Lowry\Lowry Undeeded Areas\GROUNDWATER\GW-TCE-2.doc
9/26/2005 4:22 PM

EXHIBIT



URS
8181 E. TUFTS AVENUE
DENVER, CO 80237
Ph: 303-740-2600
Fax: 303-694-3946

EXHIBIT ACCOMPANYING DESCRIPTION
TCE 2 - GROUNDWATER
WITHIN PARCEL 5(A)
EXHIBIT

DENVER COLORADO

Drawn by: JKB	Checked by: ADJ	Sheet No. 1	of 1 Sheet(s)

This exhibit does not represent a monumented survey. It is intended only to depict the attached description.

K:\Projects\Lowry Undeeded Areas\groundwater\GW-TCE-2.dwg 9/26/2005 4:23:22 PM MDT

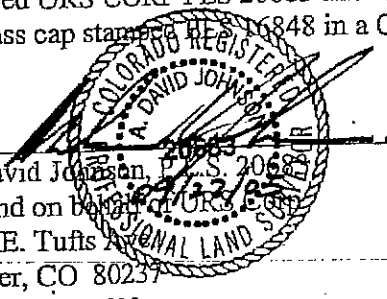
DESCRIPTION
TCE - Groundwater
Parcel 5(B)

A part of the Southeast Quarter of Section 10, Township 4 South, Range 67 West of the Sixth Principal Meridian, City and County of Denver and County of Arapahoe, State of Colorado, being more particularly described as follows:

COMMENCING at the South Quarter Corner of said Section 10;
thence North 47°09'29" East a distance of 1480.30 feet to the **POINT OF BEGINNING;**
thence North 40°57'19" West a distance of 267.82 feet to a point of non-tangent curvature;
thence along the arc of a curve to the right having a central angle of 145°32'17", a radius of 304.97 feet, an arc length of 774.66 feet and whose chord bears North 57°35'42" East a distance of 582.56 feet to a point of non-tangency;
thence South 16°39'31" East a distance of 270.37 feet to a point of non-tangent curvature;
thence along the arc of a curve to the right having a central angle of 101°22'37", a radius of 303.34 feet, an arc length of 536.72 feet and whose chord bears South 57°01'53" West a distance of 469.40 feet to the **POINT OF BEGINNING;**

Containing 266,156 square feet or 6.110 acres, more or less.

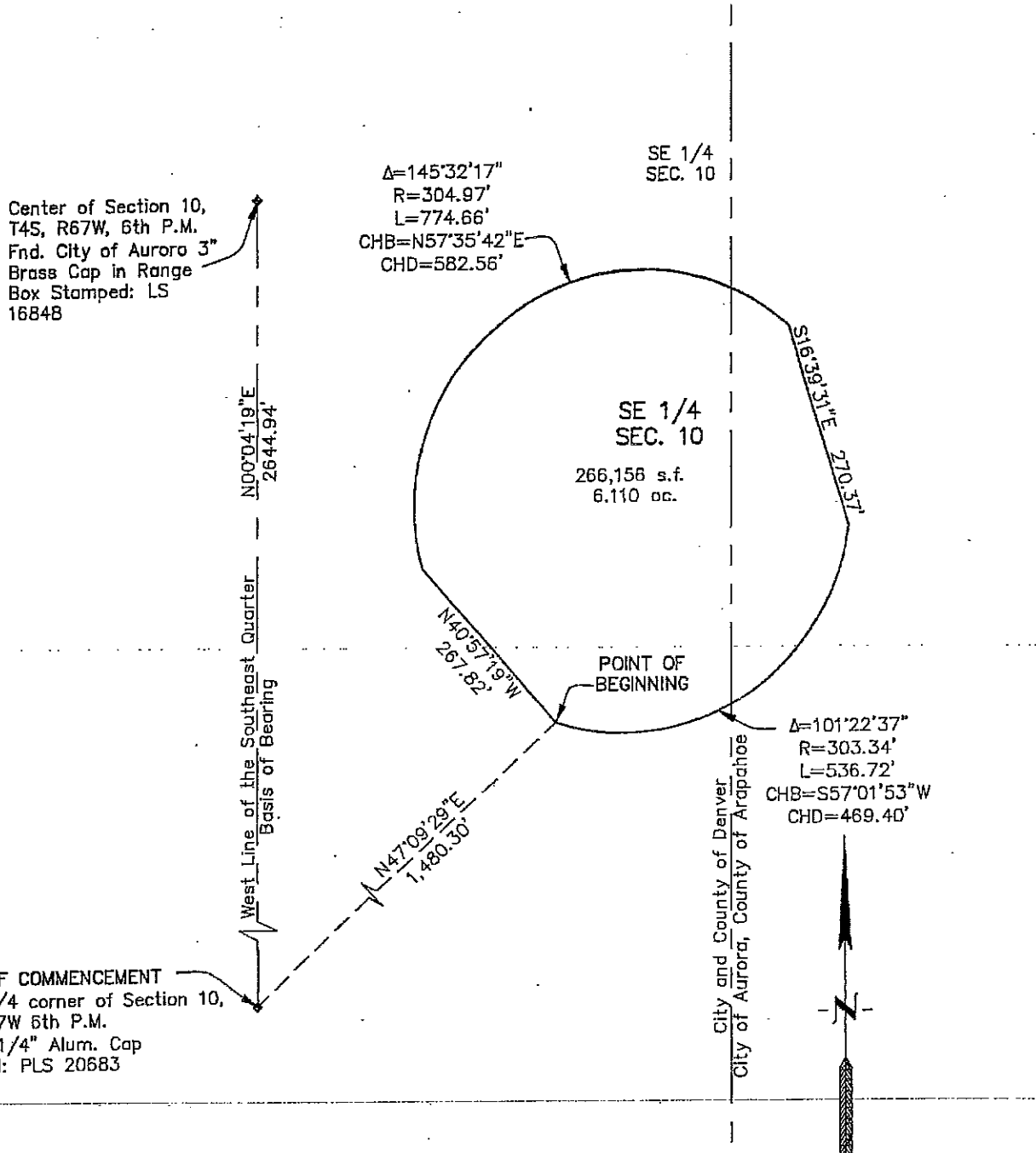
Basis of Bearings: Bearings are based on the west line of the Southeast Quarter of Section 10, Township 4 South, Range 67 West of the Sixth Principal Meridian as being North 00°04'19" East. The bearing of said line is shown on the City and County of Denver Lowry Air Force Base Boundary Survey under Project No. 94-576, dated 4/09/96 and filed in Book 23 of the County Surveyor's Land Survey/Right of Way Surveys at Pages 102-103. The South Quarter Corner of Section 10 is a found 3-1/4" aluminum cap stamped URS CORP PLS 20683 and the Center Quarter Corner of Section 10 is a found 3" brass cap stamped [illegible] 10848 in a City of Aurora range box.



09/27/05

A. David Johnson, P.L.S. 20683
For and on behalf of URS Corp.
8181 E. Tufts Avenue
Denver, CO 80237
Ph. 303.740.2600
K:\LEGALS\Lowry\Lowry Undeeded Areas\GROUNDWATER\GW-PARCEL 5(B).doc
9/26/2005 3:36:57 PM

EXHIBIT



URS
8181 E. TUFTS AVENUE
DENVER, CO 80237
Ph: 303-740-2600
Fax: 303-694-3946

EXHIBIT ACCOMPANYING DESCRIPTION
TCE - GROUNDWATER
PARCEL 5(B)
EXHIBIT

DENVER COLORADO

Drawn by: JKB	Checked by: ADJ	Sheet No. 1	of 1 Sheet(s)

This exhibit does not represent a monumented survey. It is intended only to depict the attached description.

I:\Projects\Lowry Undeeded Areas\groundwater\GW-PARCEL5(B).dwg 9/27/2005 9:57:23 AM MST

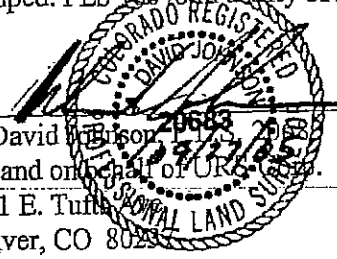
DESCRIPTION
PCE - Groundwater
Parcel 5(C)

A part of the Southeast Quarter of Section 10, Township 4 South, Range 67 West of the Sixth Principal Meridian, County of Arapahoe, State of Colorado, being more particularly described as follows:

COMMENCING at the South Quarter Corner of said Section 10;
thence North 52°38'44" East a distance of 3207.33 feet to a point on the westerly line of Havana Street and the **POINT OF BEGINNING;**
thence South 59°05'51" West a distance of 189.00 feet to a point of non-tangent curvature;
thence along the arc of a curve to the right having a central angle of 172°13'15", a radius of 180.05 feet, an arc length of 541.20 feet and whose chord bears North 20°19'25" West, a distance of 359.27 feet to a point of non-tangency;
thence North 60°40'32" East a distance of 330.66 feet to a point on said westerly line of Havana Street ;
thence South 00°11'25" West, along said westerly line, a distance of 401.78 feet to the **POINT OF BEGINNING;**

Containing 137,708 square feet or 3.161 acres, more or less.

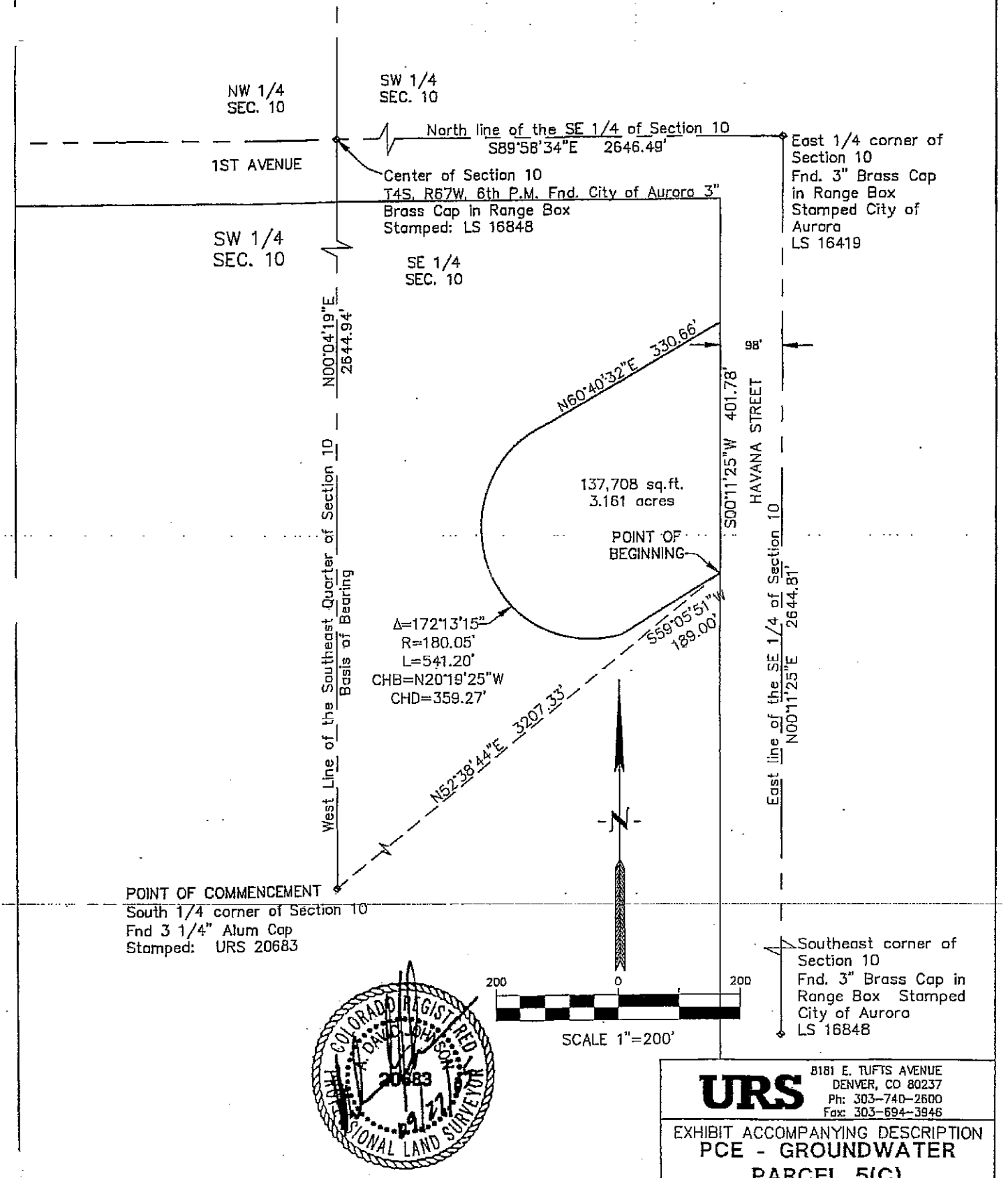
Basis of Bearings: Bearings are based on the west line of the Southeast Quarter of Section 10, Township 4 South, Range 67 West of the Sixth Principal Meridian as being North 00°04'19" East. The bearing of said line is shown on the City and County of Denver Lowry Air Force Base Boundary Survey under Project No. 94-576, dated 4/09/96 and filed in Book 23 of the County Surveyor's Land Survey/Right of Way Surveys at Pages 102-103. The South Quarter Corner of Section 10 is a found 3-1/4" aluminum cap stamped: PLS 20683 and the Center Quarter Corner of Section 10 is a found 3" brass cap stamped: PLS 16878 in City of Aurora range box.



09/27/05

A. David Johnson, PLS 20683
For and on behalf of URS Corp.
8181 E. Tufts Ave.
Denver, CO 80237
Ph. 303.740.2600
K:\LEGALS\Lowry\Lowry Undeeded Areas\GROUNDWATER\GW-PARCEL 5(C).doc
9/26/2005 3:29:22 PM

EXHIBIT



COLORADO REGISTERED
A. DAVID JOHNSON
20683
PROFESSIONAL LAND SURVEYOR

This exhibit does not represent a monumented survey. It is intended only to depict the attached description.

K:\Projects\Lowry Undeeded Areas\groundwater\GW-PARCEL5(C).dwg 9/26/2005 3:30:40 PM MDT

URS
8181 E. TUFTS AVENUE
DENVER, CO 80237
Ph: 303-740-2600
Fax: 303-694-3946

EXHIBIT ACCOMPANYING DESCRIPTION
PCE - GROUNDWATER
PARCEL 5(C)
EXHIBIT

DENVER COLORADO

Drawn by: JKB	Checked by: ADJ	Sheet No. 1	of 1 Sheet(s)

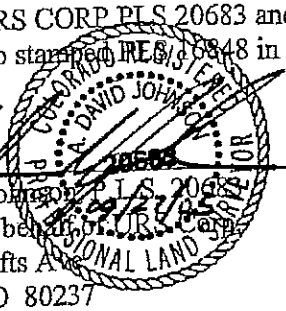
DESCRIPTION
BTEX - Groundwater
Parcel 5(D)

A part of the Southeast Quarter of Section 10, Township 4 South, Range 67 West of the Sixth Principal Meridian, City and County of Denver and County of Arapahoe, State of Colorado, being more particularly described as follows:

COMMENCING at the South Quarter Corner of said Section 10;
thence North 62°57'16" East a distance of 2077.79 feet to the **POINT OF BEGINNING;**
thence North 62°59'15" East a distance of 782.10 feet to a point on the westerly line of Havana Street;
thence South 00°11'25" West, along said westerly line, a distance of 334.39 feet;
thence South 65°47'23" West a distance of 677.83 feet to a point of non-tangent curvature;
thence along the arc of a curve to the right having a central angle of 131°54'47", a radius of 147.04 feet, an arc length of 338.52 feet and whose chord bears North 16°45'43" West a distance of 268.56 feet to the **POINT OF BEGINNING;**

Containing 223,394 square feet or 5.128 acres, more or less.

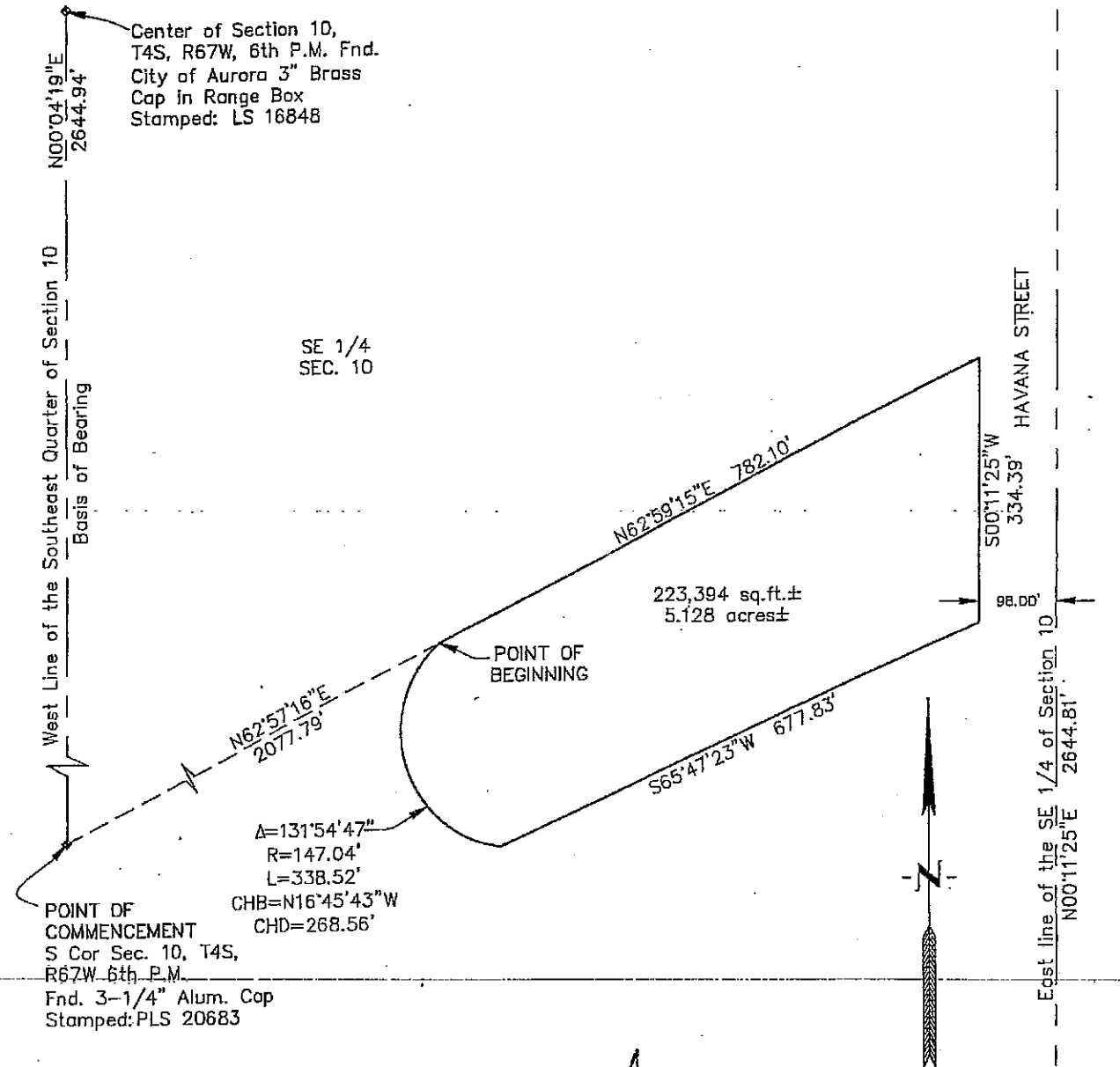
Basis of Bearings: Bearings are based on the west line of the Southeast Quarter of Section 10, Township 4 South, Range 67 West of the Sixth Principal Meridian as being North 00°04'19" East. The bearing of said line is shown on the City and County of Denver Lowry Air Force Base Boundary Survey under Project No. 94-576, dated 4/09/96 and filed in Book 23 of the County Surveyor's Land Survey/Right of Way Surveys at Pages 102-103. The South Quarter Corner of Section 10 is a found 3-1/4" aluminum cap stamped URS CORP PLS 20683 and the Center Quarter Corner of Section 10 is a found 3" brass cap stamped PLS 26848 in a City of Aurora range box.

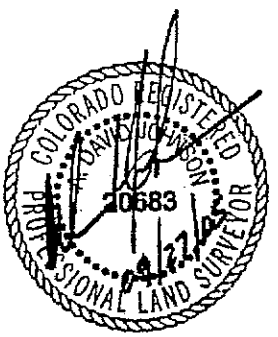


9/22/05

A. David Johnson, P.L.S. 20683
For and on behalf of: URS Corp.
8181 E. Tufts Ave.
Denver, CO 80237
Ph. 303.740.2600
K:\LEGALS\Lowry\Lowry Undeeded Areas\GROUNDWATER\GW-PARCEL 5(D).doc
9/26/2005 3:10:21 PM

EXHIBIT





This exhibit does not represent a monumented survey. It is intended only to depict the attached description.

K:\Projects\Lowry Undeeded Areas\groundwater\GW-PARCEL5(D).dwg 9/26/2005 3:19:40 PM MDT

URS
8181 E. TUFTS AVENUE
DENVER, CO 80237
Ph: 303-740-2600
Fax: 303-694-3946

EXHIBIT ACCOMPANYING DESCRIPTION

BTEX - GROUNDWATER

PARCEL 5(D)

EXHIBIT

DENVER COLORADO

Drawn by: JKB	Checked by: ADJ	Sheet No. 1	of 1 Sheet(s)

This property is subject to an Environmental Covenant held by the Colorado Department of Public Health and Environment pursuant to section 25-15-321, C.R.S.

ENVIRONMENTAL COVENANT

The United States of America, acting by and through the Secretary of the Air Force, under and pursuant to the powers and authority contained in the Defense Base Closure and Realignment Act of 1990, as amended (10 U.S.C. § 2687, note) ("Grantor") grants an Environmental Covenant ("Covenant") this 4th day of January, 2006 to the Hazardous Materials and Waste Management Division of the Colorado Department of Public Health and the Environment ("the Department") pursuant to § 25-15-321 of the Colorado Hazardous Waste Act, § 25-15-101, *et seq.* The Department's address is 4300 Cherry Creek Drive South, Denver, Colorado 80246-1530.

WHEREAS, the Grantor is the owner of certain property associated with the former Lowry Air Force Base ("LAFB"), located in Denver, Colorado, more particularly described in Attachment A, attached hereto and incorporated herein by reference as though fully set forth (hereinafter referred to as the "Property"); and

WHEREAS, pursuant to Consent Agreement Number 01-08-07-02, the Property is the subject of enforcement and remedial action pursuant to the Colorado Hazardous Waste Act, § 25-15-301, et. seq. ("CHWA"). The Property was the former base landfill (also known as Operable Unit 2 (OU2)). OU2 was historically used for disposal of Air Force waste, and associated construction waste and debris primarily from training activities conducted at LAFB. OU2 has been closed in accordance with the Phase 2 Corrective Action Plan for the Operable Unit 2 Landfill Closure at Lowry; and,

WHEREAS, the purpose of this Covenant is to ensure protection of human health and the environment by minimizing the potential for exposure to any hazardous substance, hazardous waste, hazardous constituents, and/or solid waste that remains in the landfill on the Property. The Covenant will accomplish this by prohibiting those activities that may interfere with the landfill cover or its monitoring or control systems and by creating a review and approval process to ensure that any such intrusive activities are conducted with appropriate precautions to avoid or eliminate any hazards; and

WHEREAS, the Grantor desires to subject the Property to certain covenants and restrictions as provided in Article 15 of Title 25, Colorado Revised Statutes, which covenants and restrictions shall burden the Property and bind the Grantor, and all parties having any right, title or interest in the Property, or any part thereof, its heirs, successors, assigns, and any persons using the land, as described herein, for the benefit of the Department.

NOW, THEREFORE, the Grantor hereby grants this Environmental Covenant to the Department, and declares that the Property as described in Attachment A shall hereinafter be bound by, held, sold, and conveyed subject to the following requirements set forth in paragraphs 1 through 10 below, which shall run with the Property in perpetuity and be binding on Grantor and all parties having any right, title, or interest in the Property, or any part thereof, their heirs,

successors and assigns, and any persons using the land, as described herein. As used in this Environmental Covenant, the term OWNER means the record owner of the Property and, if any, any other person or entity legally authorized to make decisions regarding the transfer of the Property or placement of encumbrances on the Property, other than by the exercise of eminent domain.

1. Use restrictions

a. Unless the Covenant is modified in accordance with the State's statute and regulations, OU2 will only be used as open space/ non-irrigated park following closure.

b. In general, the OWNER shall not use or conduct any activity on OU2 that will adversely affect:

i. the integrity of the cover
ii. the effectiveness of drainage or erosion controls
iii. slope stability, or
iv. groundwater or gas monitoring or control systems.

Specifically, no activity shall be conducted or permitted by the OWNER, nor shall the OWNER use OU2 in any manner that is inconsistent with the use designated in the preceding paragraph or that is not in compliance with the requirements of section 3.6.1(A) of 6 CCR 1007-2 or the *Final Closure Plan for the Operable Unit 2 (OU2) Landfill Closure at Lowry*, issued for review August 29, 2003, as finalized after Department review and approval.

c. The OWNER shall not extract or utilize in any manner whatsoever any water from the upper aquifer below the surface of the ground within OU2 for any purpose whatsoever, unless the OWNER shall first have obtained the prior written approval of the Department.

d. For the duration of this covenant, the Air Force shall perform all of the requirements set forth in sections 3 and 4 of the Post-Closure Operation and Maintenance Plan, Appendix E of the *Final Closure Plan for the Operable Unit 2 (OU2) Landfill Closure at Lowry*, issued for review August 29, 2003, as finalized after Department review and approval.

2. Modifications This Covenant runs with the land and is perpetual, unless modified or terminated pursuant to this paragraph. The OWNER or its successors and assigns may request that the Department approve a modification or termination of the Covenant. The request shall contain information showing that the proposed modification or termination shall, if implemented, ensure protection of human health and the environment. The Department shall review any submitted information and may request additional information. If the Department determines that the proposal to modify or terminate the Covenant will ensure protection of human health and the environment, it shall approve the proposal. No modification or termination of this Covenant shall be effective unless the Department has approved such modification or termination in writing. Information to support a request for modification or termination may include one or more of the following:

a) a proposal to perform additional remedial work;
b) new information regarding the risks posed by the residual contamination;
c) information demonstrating that residual contamination has diminished;

d) information demonstrating that the proposed modification would not adversely impact the remedy and is protective of human health and the environment; and,
e) other appropriate supporting information.

3. Conveyances The OWNER shall notify the Department at least fifteen (15) days in advance of any proposed grant, transfer, or conveyance of any interest in any or all of the Property.

4. Notice to Lessees The OWNER agrees to incorporate, either in full or by reference the restrictions of this Covenant in any leases, licenses, or other instruments granting a right to use the Property.

5. Notification for proposed construction and land use The OWNER and/or its transferees shall notify the Department simultaneously when submitting any application to a local government for a building permit or change in land use at the Property.

6. Inspections The Department shall have the right of entry to the Property at reasonable times with prior notice for the purpose of determining compliance with the terms of this Covenant. Nothing in this Covenant shall impair any other authority the Department may otherwise have to enter and inspect the Property.

7. No Liability The Department does not acquire any liability under State law by virtue of accepting this Covenant, nor does any other named beneficiary of this Covenant acquire any liability under State law by virtue of being such a beneficiary.

8. Enforcement The Department may enforce the terms of this Covenant pursuant to §25-15-322. C.R.S. The Grantor and any named beneficiary of this Covenant may file suit in district court to enjoin actual or threatened violations of this Covenant.

9. Owner's Compliance Certification OWNER shall submit an annual Report to the Department, on the anniversary of the date this Covenant was signed by Grantor, detailing OWNER's compliance, and any lack of compliance, with the terms of this Covenant.

10. Notices Any document or communication required under this Covenant shall be sent or directed to:

Hazardous Waste Corrective Action Unit Leader
Hazardous Materials and Waste Management Leader
Colorado Department of Public Health and the Environment
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

IN WITNESS WHEREOF, I have hereunto set my hand at the direction of the Secretary of the Air Force, the day and year first above written.

THE UNITED STATES OF AMERICA

By: Kathryn M. Halvorson
KATHRYN M. HALVORSON
Director
Air Force Real Property Agency

Witness:
Kathryn Peltan

Commonwealth of Virginia :
ss.
County of Arlington :

The foregoing instrument was acknowledged before me this 4th day of January, 2006, by Kathryn M. Halvorson as the Director of Air Force Real Property Agency.

PAUL C. MACPHERSON
NOTARY PUBLIC
COMMONWEALTH
OF VIRGINIA
My Commission Expires
September 30, 2009

Witness my hand and official seal

Notary Public
My Commissions Expires on September 30, 2009

(seal)

Accepted by the Colorado Department of Public Health and Environment this 13th day of January 2006.

By: Gary W. Baughman
GARY BAUGHMAN
Director
Hazardous Materials Waste Management Division

STATE OF COLORADO)
) ss:
COUNTY OF DENVER)

The foregoing instrument was acknowledged before me this 23rd day of January 2006 by Gary W. Baughman on behalf of the Colorado Department of Public Health and Environment.

Notary Public
Address: 4300 Cherry Creek Dr. S. Denver
My commission expires: 2-29-08

IN WITNESS WHEREOF, I have hereunto set my hand at the direction of the Secretary of the Air Force, the day and year first above written.

THE UNITED STATES OF AMERICA

By: Kathryn M. Halvorson
KATHRYN M. HALVORSON
Director
Air Force Real Property Agency

Witness:
Kathryn Peters

Commonwealth of Virginia :
ss.
County of Arlington :

The foregoing instrument was acknowledged before me this 4th day of JANUARY, 2006, by Kathryn M. Halvorson as the Director of Air Force Real Property Agency.

Witness my hand and official seal

PAUL C. MACPHERSON
NOTARY PUBLIC
COMMONWEALTH
OF VIRGINIA
My Commission Expires
September 30, 2009

(seal)

Notary Public
My Commissions Expires on September 30, 2009.

Accepted by the Colorado Department of Public Health and Environment this 13th day of January 2006.

By: Gary W. Baughman
GARY BAUGHMAN
Director
Hazardous Materials Waste Management Division

STATE OF COLORADO)
) ss:
COUNTY OF DENVER)

The foregoing instrument was acknowledged before me this 5th day of January 2006 by Gary W. Baughman on behalf of the Colorado Department of Public Health and Environment.

Notary Public
Address 4300 Cherry Creek Dr. S. Denver
My commission expires: 9-29-08.

ATTACHMENT A

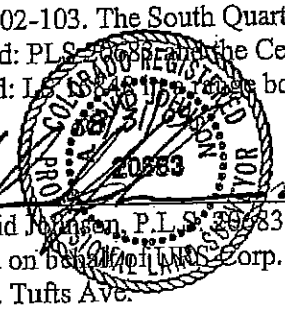
DESCRIPTION
Parcel 2

A part of the Southeast Quarter of Section 9, part of the Southwest Quarter of Section 10, part of the Northwest Quarter of Section 15 and part of the Northeast Quarter of Section 16, Township 4 South, Range 67 West of the Sixth Principal Meridian, City and County of Denver, State of Colorado, being more particularly described as follows:

COMMENCING at the South Quarter Corner of said Section 10;
thence North 89°58'53" West, along the south line of said Southwest Quarter, a distance of 783.22 feet to the **POINT OF BEGINNING;**
thence South 07°03'57" East a distance of 221.72 feet;
thence South 51°58'32" East a distance of 782.86 feet;
thence South 72°23'13"West a distance of 1178.79 feet;
thence North 17°12'50"West a distance of 21.42 feet;
thence South 72°48'22" West a distance of 1336.10 feet to a point on the northerly line of Alameda Avenue described in Book 71 at Page 76 in the Clerk and Recorders Office of said City and County of Denver and a point of non-tangent curvature;
thence along said northerly line and along the arc of a curve to the right, having a central angle of 2°11'49", a radius of 904.36 feet, an arc length of 34.68 feet and whose chord bears North 83°39'08" West a distance of 34.67 feet;
thence North 14°07'41" West, non-tangent to the previous course, a distance of 1479.84 feet;
thence North 78°47'16" East a distance of 1002.84 feet to a point of non-tangent curvature;
thence along the arc of a curve to the left having a central angle of 67°12'34", a radius of 420.06 feet, an arc length of 492.74 feet and whose chord bears North 44°26'58" East a distance of 464.97 feet to a point of reverse non-tangent curvature;
thence along the arc of a curve to the right having a central angle of 144°09'24", a radius 92.97 feet, an arc length of 233.90 feet and whose chord bears North 82°51'54" East a distance 176.91 feet to a point of reverse non-tangent curvature;
thence along the arc of a curve to the left having a central angle of 22°39'25", a radius of 1395.92 feet, an arc length of 552.00 feet and whose chord bears South 37°48'58" East a distance of 548.41 feet;
thence North 89°39'24" East, non-tangent with the previous course, a distance of 321.63 feet;
thence South 07°03'57" East a distance of 123.98 feet to the **POINT OF BEGINNING;**

Containing 3,038,767 square feet or 69.760 acres, more or less.

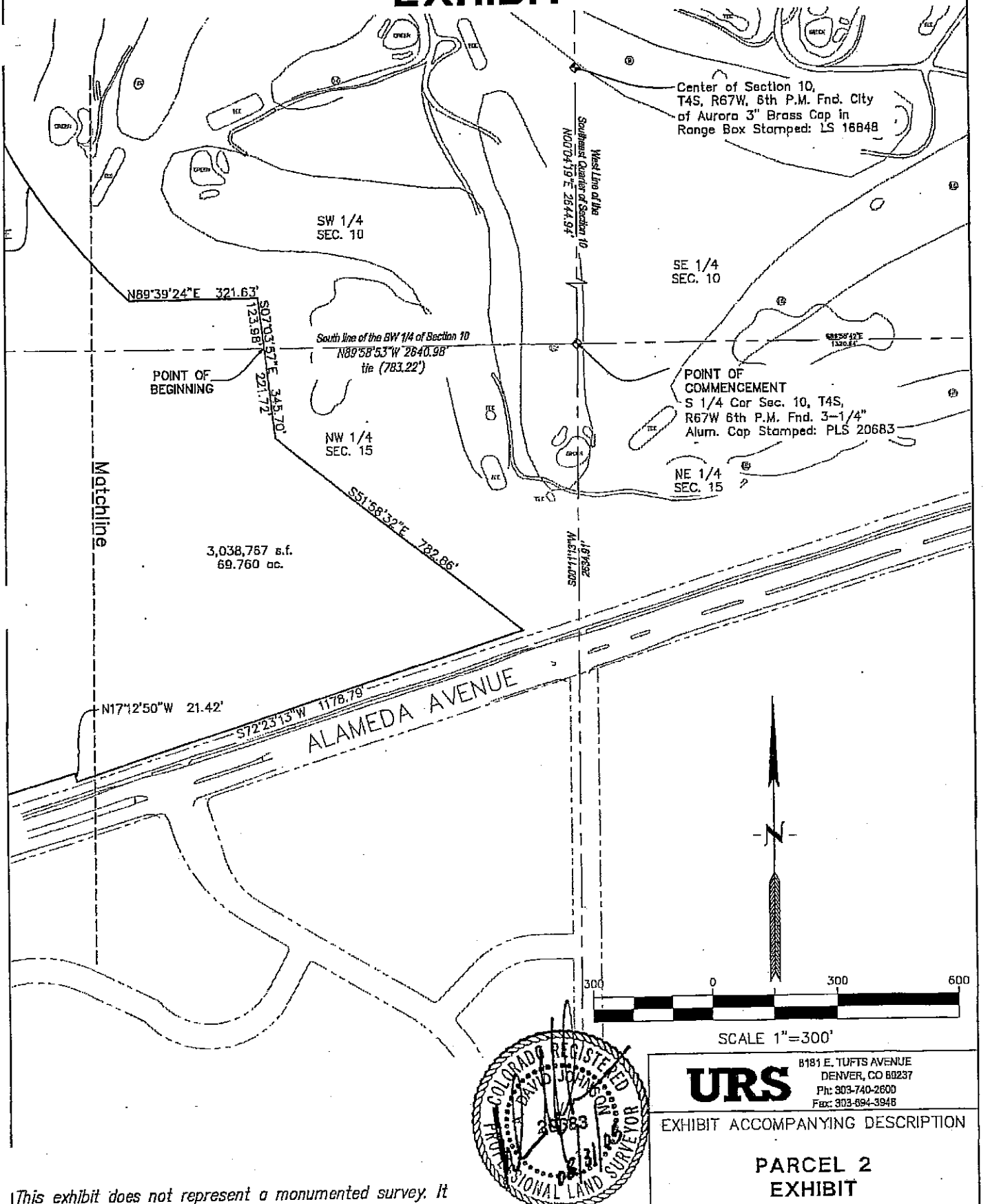
Basis of Bearings: Bearings are based on the west line of the Southeast Quarter of Section 10, Township 4 South, Range 67 West of the Sixth Principal Meridian as being North 00°04'19" East. The bearing of said line is shown on the City and County of Denver Lowry Air Force Base Boundary Survey under Project No. 94-576, dated 4/09/96 and filed in Book 23 of the County Surveyor's Land Survey/Right of Way Surveys at Pages 102-103. The South Quarter Corner of Section 10 is a found 3-1/4" Aluminum cap Stamped: PLS 20683 and the Center Quarter corner of Section 10 is a found 3" brass cap stamped: LS 10846 in a range box.



08/31/05

A. David Johnsen, P.L.S. 20683
For and on behalf of LRS Corp.
8181 E. Tufts Ave.
Denver, CO 80237
Ph. 303.740.2600
K:\Projects\Lowry Undeeded Areas\Landfill\Landfill.doc
8/30/2005 9:01 AM

EXHIBIT



COLORADO REGISTERED DAVID JOHNSON 30683 PROFESSIONAL LAND SURVEYOR

This exhibit does not represent a monumented survey. It is intended only to depict the attached description.

K:\Projects\Lowry Undeeded Areas\Landfill.dwg 8/26/2005 8:00:08 AM MST

URS
8181 E. TUFTS AVENUE
DENVER, CO 80237
Ph: 303-740-2600
Fax: 303-694-3946

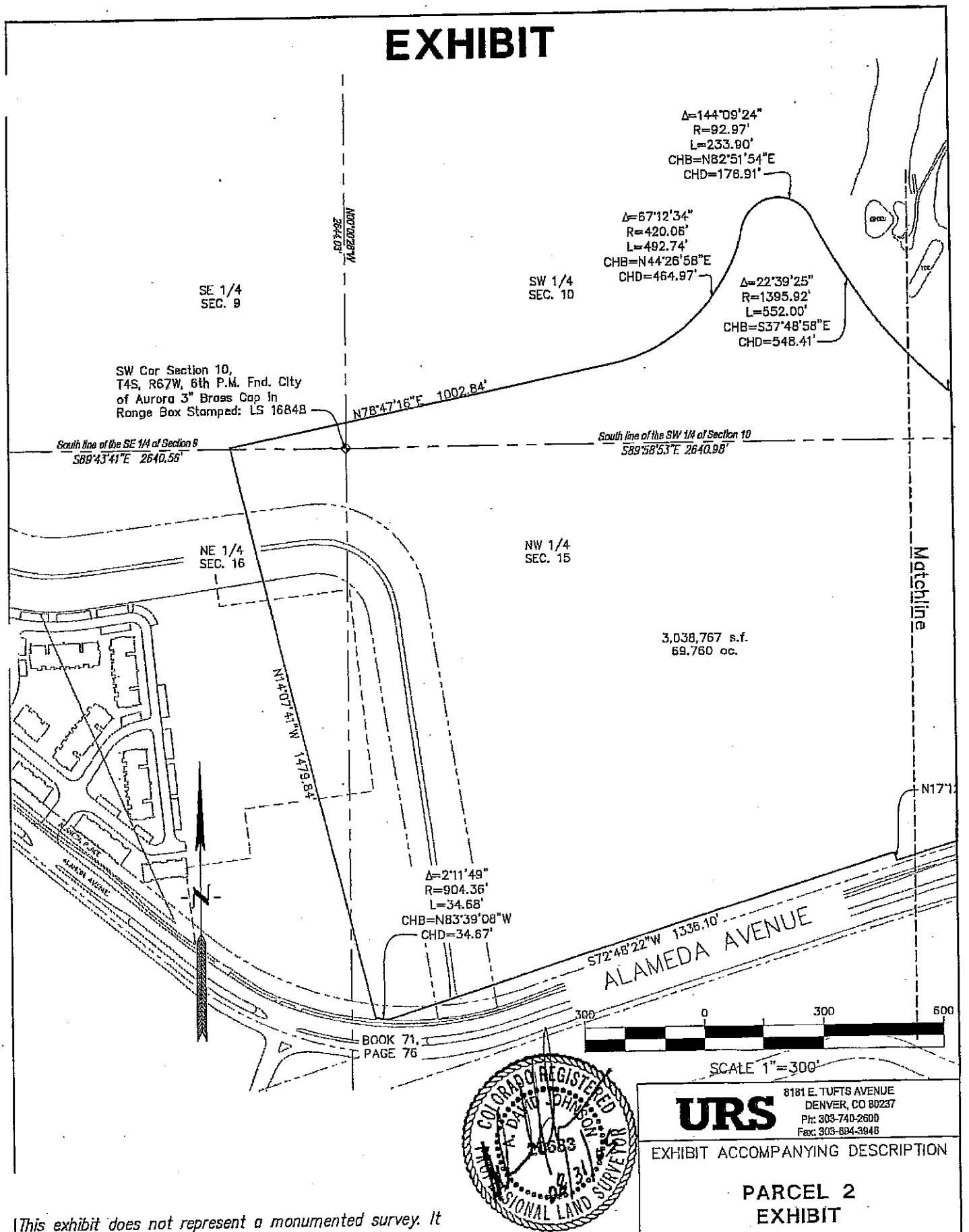
EXHIBIT ACCOMPANYING DESCRIPTION

PARCEL 2 EXHIBIT

DENVER COLORADO

Drawn by: DEA	Checked by: ADJ	Sheet No. 1	of 2 Sheet(s)

EXHIBIT



This exhibit does not represent a monumented survey. It is intended only to depict the attached description.

K:\Projects\Lowry Undeeded Areas\LandFill.dwg 8/26/2005 8:00:08 AM MST

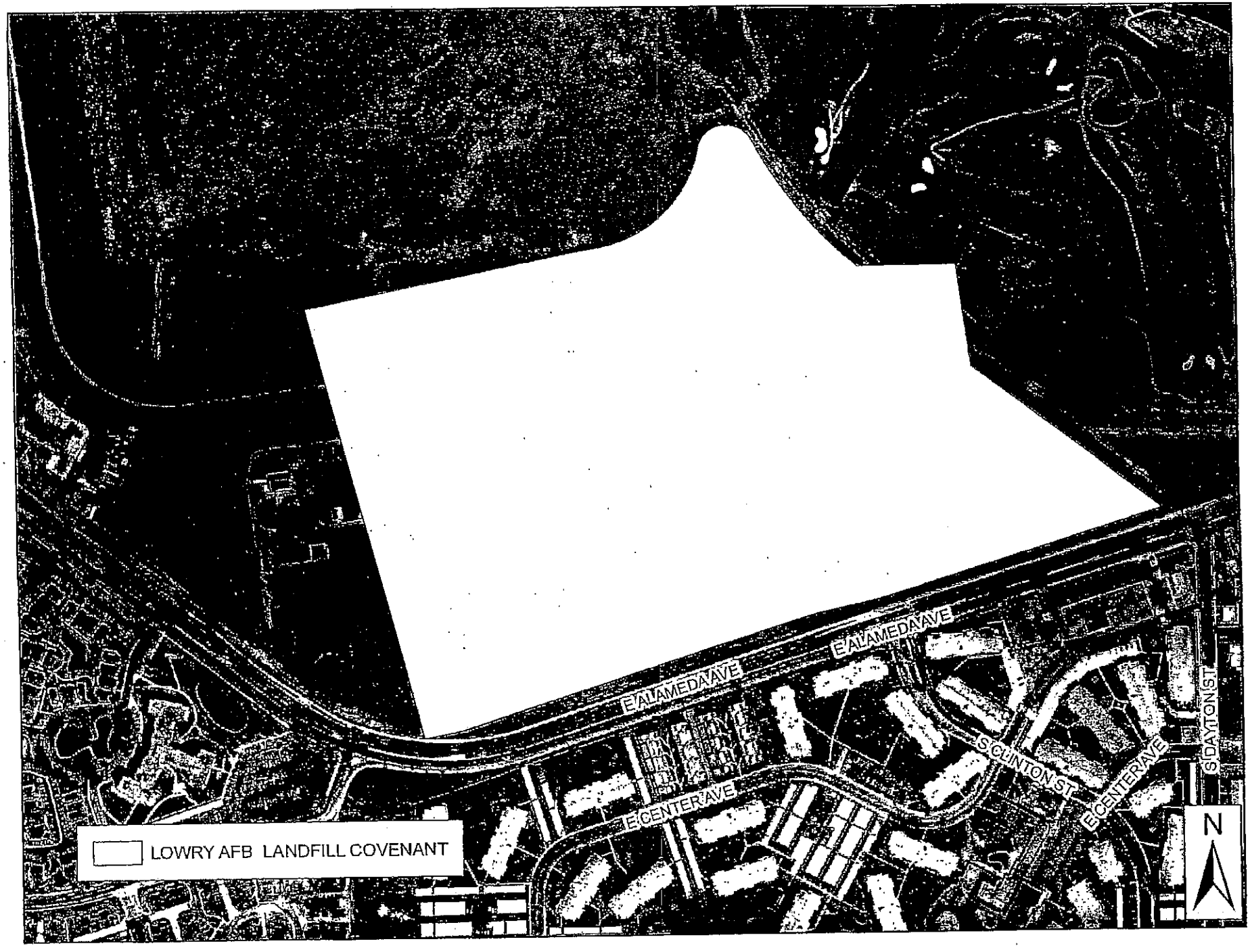
URS
8181 E. TUFTS AVENUE
DENVER, CO 80237
Ph: 303-740-2600
Fax: 303-694-3946

EXHIBIT ACCOMPANYING DESCRIPTION

PARCEL 2 EXHIBIT

DENVER COLORADO

Drawn by: DEA	Checked by: ADJ	Sheet No. 2	of 2 Sheet(s)


E ALAMEDA AVE
E ALAMEDA AVE
E CENTER AVE
S CLINTON ST
E CENTER AVE
S DAYTON ST
LOWRY AFB LANDFILL COVENANT
N

COPY

RESTRICTIVE USE COVENANT

This Restrictive Use Covenant is made this 5th day of April, 2001, by the LOWRY ECONOMIC REDEVELOPMENT AUTHORITY, a separate legal entity established pursuant to an Intergovernmental Agreement between the City and County of Denver, Colorado, and the City of Aurora, Colorado, pursuant to the provision of C.R.S. § 29-1-203(4) ("LRA"), and the SECRETARY OF THE AIR FORCE, on behalf of the United States of America ("Air Force or Government"), and WEINGARTEN/MILLER/LOWRY JOINT VENTURE, a Texas joint venture ("MW") and ALBERTSON'S, INC., a Delaware Corporation, (Albertson's).

Recitals

A. Pursuant to its authority under the Defense Base Closure and Realignment Act of 1990 to dispose of the real property and related personal property comprising the former Lowry Air Force Base ("Lowry AFB"), Air Force has entered into an Agreement for Economic Development Conveyance with LRA, dated June 30, 1995, as amended (the "EDC Agreement") and other agreements described in the EDC Agreement.

B. Pending conveyance by deed of the property identified in the EDC Agreement, LRA and the Air Force have entered into that certain Department of the Air Force Lease of Property on Lowry Air Force Base, Colorado, dated June 30, 1995, as amended (the "Air Force Lease"), a memorandum of which was recorded January 8, 1997, under Reception No. 9700003185 of the records of the Clerk and Recorder of the City and County of Denver, Colorado. Pursuant to the Air Force Lease, LRA was granted possession of the property described in the aforementioned memorandum ("EDC Property") and the right to use, redevelop, operate, and maintain it, subject to and in accordance with all of the terms and conditions contained in the EDC Agreement, the Air Force Lease, and the other documents described in the EDC Agreement (collectively the "Air Force Documents").

C. In furtherance of the authority and powers granted to LRA under the Air Force Documents, the LRA has entered into an Agreement to Lease and Sell property located within the EDC Property with MW, which property is described on **Exhibit "A"**, which is attached hereto and incorporated herein by this reference (the "Property").

D. MW intends to develop a retail shopping center and commercial offices on the Property.

E. Albertson's, pursuant to a sublease with MW, intends to develop a grocery store on a portion of the Property.

F. The parties hereto desire to place certain restrictions on the use of the Property, which restrictions will be in effect until the Air Force completes to the satisfaction of

Colorado Department of Public Health and Environment ("CDPHE") and the Air Force certain remedial environmental measures, and to evidence these restrictions the parties are executing this Restrictive Use Covenant.

NOW, THEREFORE, the parties do hereby publish and declare that the Property shall be held, sold, leased, and conveyed subject to the following restrictions, covenants, terms, conditions, and agreements which shall run with the Property and be binding on all parties having any right, title, or interest in the Property, or any part thereof, their heirs, personal representatives, successors, and assigns.

1. On behalf of themselves and their successors, the parties hereto adopt and agree to be bound by the Restrictive Covenants ("Restrictions") set forth on **Exhibit "B"** attached hereto and incorporated herein by this reference.

2. The Restrictions shall remain in place until the Air Force determines, in concurrence with CDPHE, that such Restrictions are no longer necessary to protect human health and the environment and to protect the Air Force's environmental remedial activities. The Air Force agrees to sign a release after a determination is made that such Restrictions are no longer necessary.

3. Observance of the covenants contained in this Restrictive Use Covenant shall be assured by the Air Force and shall be enforced by the Air Force by an action for specific performance, injunction, or such other remedies available at law or in equity. If any action is filed to enforce the terms hereof, the prevailing party shall be awarded its reasonable attorneys' fees and costs.

4. MW submitted and the Government has approved a site plan identified as "Lowry Town Center, Denver, Colorado, Miller Weingarten – Developer, Site Plan", dated 1/3/01, and approved by the BRAC Cleanup Team ("BCT") on March 30, 2001 for the construction of a TownCenter on the Property. Such plan together with any amendments thereto which are required to be approved and have been approved pursuant hereto shall be referred to as the Site Plan. In the event the BCT is no longer in existence at a time when some action, notice or response concerns the BCT in this Restrictive Use Covenant, then, upon such event, all references to the BCT shall be changed to the Air Force, Environmental Protection Agency and CDPHE. MW must notify the BCT in writing and request a review of and approval of any Material Changes to the Site Plan. The Government as a member of the BCT shall make a good faith effort to review and approve changes to the Site Plan within thirty (30) days from its receipt of said notice subject however to the availability of staff and funds.

5 Based on information presently available to the Government regarding the extent of contamination affecting the Property as of the date hereof, the Air Force agrees that it will place no further restrictions on the use of the Property or any buildings constructed in material conformance with the Site Plan.

Changes which are in material conformance with the Site Plan are defined for purposes of the Property as "Immaterial Changes" and shall include without

limitation, (a) an increase of less than (i) 10% of the original size of the building footprint as set forth in the Site Plan or (ii) 1000 square feet, whichever is greater, (b) changes in a building location of not more than twenty-five (25) feet from the original location shown in the Site Plan, (c) changes in location of landscaping and other site work, and (d) changes in the height of a building. Any change to the Site Plan which is not of a nature that is in similar size, type, and/or scope to those Immaterial Changes described above shall be defined for the purposes of the Property, as a "Material Change".

6. At the time that title to the Property is transferred by the Government to the LRA, this Restrictive Use Covenant shall be recorded in the records of the Clerk and Recorder of the City and County of Denver, Colorado.

IN WITNESS WHEREOF, the parties have executed this Restrictive Use Covenant as of the day and year first above written.

LOWRY ECONOMIC REDEVELOPMENT AUTHORITY, a separate legal entity established pursuant to an Intergovernmental Agreement between the City and County of Denver, Colorado, and the City of Aurora, Colorado, pursuant to the provision of C.R.S. § 29-1-203(4)

Thomas O Markh

By Thomas O. Markham, Executive Director

STATE OF COLORADO)
) ss.
CITY ANDCOUNTY OF DENVER)

The foregoing instrument was acknowledged before me this 5th day of April, 2001, by Thomas O. Markham as Executive Director of LOWRY ECONOMIC REDEVELOPMENT AUTHORITY, a separate legal entity established pursuant to an Intergovernmental Agreement between the City and County of Denver, Colorado, and the City of Aurora, Colorado, pursuant to the provision of C.R.S. § 29-1-203(4).

HALLENDA R. SLATTERY
NOTARY PUBLIC
STATE OF COLORADO
My Commission Expires 03/28/2005

Witness my hand and official seal.
My commission expires: 3/28/2005

Hallenda R Slatter

Notary Public

SECRETARY OF THE AIR FORCE

Albert F. Lowas, Jr., Director
Air Force Base Conversion Agency

COMMONWEALTH OF VIRGINIA)
) ss
COUNTY OF ARLINGTON)

On the 6 day of April, 2001, before me, Sonia M. Soto, the undersigned Notary Public, personally appeared Albert F. Lowas, Jr., personally known to me to be the person whose name is subscribed to the foregoing Restrictive Use Covenant, and personally known to me to be the Director, Air Force Base Conversion Agency, and acknowledged that the same was the act and deed of the Secretary of the Air Force and that he executed the same as the act of the Secretary of the Air Force.

GIVEN under my hand and official seal and office, this the 6 day of April, 2001.

Sonia M. Soto
Notary Public
Commonwealth of Virginia

My commission expires: March 31, 2004

SEAL

WEINGARTEN/MILLER/LOWRY JOINT VENTURE, a Texas joint venture

By Miller Lowry LLC, a Colorado limited liability company, joint venturer

By _____

Title Manager

STATE OF COLORADO)
) ss.
COUNTY OF Arapahoe)

The foregoing instrument was acknowledged before me this 26th day of April, 2001, by Stewart A. Miller as Manager of Miller Lowry LLC, a Colorado limited liability company, joint venturer of WEINGARTEN/MILLER/LOWRY JOINT VENTURE, a Texas joint venture.

Witness my hand and official seal.

My commission expires: 11/04/2004

BARBARA McCRORIE
NOTARY PUBLIC
STATE OF COLORADO
My Commission Expires Nov. 4, 2004

_____
Notary Public

ALBERTSON'S, INC., a Delaware corporation

By _____
LINCOLN V. SHARP, JR.
Title Vice President, Real Estate Law

HT/SLB

STATE OF IDAHO)
) ss.
COUNTY OF ADA)

The foregoing instrument was acknowledged before me this 4th day of June, 2001, by Lincoln V. Sharp, Jr. as Vice President, Real Estate Law of Albertson's, Inc., a Delaware corporation

Witness my hand and official seal.

My commission expires: 10/15/05

SUE EDWARDS NOTARY PUBLIC STATE OF IDAHO

_____
Notary Public

EXHIBIT A

Description of the Property

Exhibit A
To
Restrictive Use Covenant

Property

THOSE PARTS OF LOT 1 AND OF LOT 2, BLOCK 1, LOWRY FILING NO. 5, CITY AND COUNTY OF DENVER, STATE OF COLORADO, DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF SAID LOT 1;
THENCE NORTH 00 DEGREES 10 MINUTES 10 SECONDS EAST ALONG THE WEST LINE OF SAID LOT 1 A DISTANCE OF 717.58 FEET TO THE NORTHWEST CORNER THEREOF;
THENCE SOUTH 89 DEGREES 49 MINUTES 50 SECONDS EAST ALONG THE NORTH LINE OF SAID LOT 1 A DISTANCE OF 513.21 FEET;
THENCE NORTH 57 DEGREES 53 MINUTES 28 SECONDS EAST CONTINUING ALONG SAID NORTH LINE A DISTANCE OF 16.50 FEET TO THE NORTHEAST CORNER OF SAID LOT 1;
THENCE SOUTHEASTERLY ALONG THE EASTERLY LINE OF SAID LOT 1, ALONG A NON-TANGENTIAL CURVE CONCAVE TO THE NORTHEAST, SAID CURVE HAVING A CENTRAL ANGLE OF 06 DEGREES 50 MINUTES 22 SECONDS, A RADIUS OF 285.00 FEET FOR AN ARC LENGTH OF 34.02 FEET (THE CHORD OF SAID CURVE BEARS SOUTH 32 DEGREES 15 MINUTES 33 SECONDS EAST, 34.00 FEET);
THENCE SOUTH 63 DEGREES 43 MINUTES 14 SECONDS WEST, 11.80 FEET;
THENCE WESTERLY ALONG A NON-TANGENTIAL CURVE CONCAVE TO THE NORTH, SAID CURVE HAVING A CENTRAL ANGLE OF 18 DEGREES 15 MINUTES 46 SECONDS, A RADIUS OF 35.03 FEET FOR AN ARC LENGTH OF 11.17 FEET (THE CHORD OF SAID CURVE BEARS SOUTH 79 DEGREES 28 MINUTES 58 SECONDS WEST, 11.12 FEET);
THENCE SOUTH 90 DEGREES 00 MINUTES 00 SECONDS WEST, 98.75 FEET;
THENCE SOUTHWESTERLY AND SOUTHERLY ALONG A TANGENTIAL CURVE CONCAVE TO THE SOUTHEAST, SAID CURVE HAVING A CENTRAL ANGLE OF 90 DEGREES 00 MINUTES 00 SECONDS, A RADIUS OF 25.00 FEET FOR AN ARC LENGTH OF 39.27 FEET;
THENCE SOUTH 00 DEGREES 00 MINUTES 00 SECONDS WEST, TANGENT TO SAID CURVE 43.80 FEET;
THENCE SOUTHEASTERLY AND EASTERLY ALONG A TANGENTIAL CURVE CONCAVE TO THE NORTHEAST, SAID CURVE HAVING A CENTRAL ANGLE OF 90 DEGREES 00 MINUTES 00 SECONDS, A RADIUS OF 10.00 FEET FOR AN ARC LENGTH OF 15.71 FEET;
THENCE NORTH 90 DEGREES 00 MINUTES 00 SECONDS EAST, TANGENT TO SAID CURVE, 34.95 FEET;
THENCE SOUTH 36 DEGREES 28 MINUTES 38 SECONDS EAST, 59.76 FEET;
THENCE NORTH 53 DEGREES 31 MINUTES 22 SECONDS EAST, 79.04 FEET;
THENCE NORTH 36 DEGREES 28 MINUTES 38 SECONDS WEST, 30.28 FEET;
THENCE NORTH 53 DEGREES 31 MINUTES 22 SECONDS EAST, 52.76 FEET TO THE EASTERLY LINE OF SAID LOT 1;
THENCE SOUTH 36 DEGREES 28 MINUTES 38 SECONDS EAST, ALONG SAID EASTERLY LINE 538.67 FEET TO THE MOST EASTERLY CORNER OF SAID LOT 1;
THENCE SOUTH 53 DEGREES 40 MINUTES 30 SECONDS WEST ALONG THE SOUTHERLY LINE OF SAID LOT 1 AND ITS SOUTHWESTERLY EXTENSION (ALSO BEING THE NORTHERLY LINES OF LOT 3 AND LOT 4 OF SAID LOWRY FILING NO. 5) A DISTANCE OF 436.09 FEET;
THENCE NORTH 36 DEGREES 28 MINUTES 38 SECONDS WEST, 169.64 FEET;
THENCE SOUTH 53 DEGREES 31 MINUTES 29 SECONDS WEST, 99.52 FEET;
THENCE NORTH 44 DEGREES 55 MINUTES 22 SECONDS WEST, 6.17 FEET;
THENCE SOUTH 45 DEGREES 05 MINUTES 46 SECONDS WEST, 141.44 FEET;
THENCE WESTERLY ALONG A TANGENTIAL CURVE CONCAVE TO THE NORTH, SAID CURVE HAVING A CENTRAL ANGLE OF 90 DEGREES 07 MINUTES 07 SECONDS, A RADIUS OF 8.50 FEET FOR AN ARC LENGTH OF 13.37 FEET;
THENCE NORTH 44 DEGREES 47 MINUTES 07 SECONDS WEST, 29.95 FEET;

THENCE NORTHERLY ALONG A TANGENTIAL CURVE CONCAVE TO THE NORTHEAST, SAID CURVE HAVING A CENTRAL ANGLE OF 44 DEGREES 47 MINUTES 07 SECONDS, A RADIUS OF 8.50 FEET FOR AN ARC LENGTH OF 6.64 FEET;
THENCE NORTH 00 DEGREES 00 MINUTES 00 SECONDS EAST, 17.09 FEET TO THE INTERSECTION WITH THE EASTERLY EXTENSION OF THE SOUTH LINE OF SAID LOT 1;
THENCE NORTH 89 DEGREES 49 MINUTES 50 SECONDS WEST ALONG SAID EXTENSION AND LINE, 218.51 FEET TO THE POINT OF BEGINNING.

EXHIBIT B

Restrictive Covenants

The obligations set forth below shall be binding on the United States of America, and any and all occupants, tenants, subtenants, and successors of the current owner.

I. The LRA, Albertson's, and MW by acceptance of this Restrictive Use Covenant, covenant and agree for themselves. their successors and assigns that activities in subparagraphs 1(a), 1(b), 1(c), 1(d), 1(e), 1(f) and 1 (g) shall not be permitted on the Property unless: (i) the restrictions set forth in this paragraph have terminated pursuant to Paragraph 2 of the Restrictive Use Covenant to which this exhibit is attached; or (ii) the Property owner or lessee or its tenants or subtenants has obtained all necessary state and federal permits and prior written approval from the Department of the Air Force after concurrence of the Colorado Department of Public Health and Environment ("CDPHE") and the Environmental Protection Agency ("EPA") to permit a prohibited use or activity. The costs associated with obtaining the approval necessary to authorize a prohibited use or activity, including the cost of any studies. analysis or remediation required to obtain such approval, shall be the sole responsibility of the Property owner or lessee or its tenants or subtenants, without any cost whatsoever to the United States.

a. Residential habitation of the Property.

b. Commercial buildings located or constructed over known groundwater contamination must contain a heating, ventilating and air conditioning system ("HVAC") which while operating is designed to provide an internal positive pressure in the building and such HVAC must be operated in accordance with normal and customary operating procedures for similar buildings in Denver, Colorado.

c. Child care:

d. Excavation or construction activities at or below a depth of 25 feet below existing ground surface (or to groundwater. whichever is encountered first);

e. Utilization. extraction. or consumption of any water from the aquifer below ground surface of the Property;

f. Irrigation of more than thirty percent (30%) of the total acreage of the Property; or

g. Activities that would interfere with or disrupt required remedial investigations, response actions or oversight activities that are permitted pursuant to this Restrictive Use Covenant.

II. Until such time as the Restrictions set forth in Paragraph 1 have terminated pursuant to Paragraph 2 of the Restrictive Use Covenant to which this exhibit is attached, the United States of America, acting through the Department of Air Force or the Environmental Protection Agency, and their respective officials, agents, employees, contractors, and subcontractors (collectively the "Government"), subject to the qualifications set forth below, shall retain the right of access to the Property, including the right of access to, and use of, utilities at the Government's expense for only the following purposes, either on the Property or on adjoining lands, and for such other purposes related to obligations arising under Section 120 of the Comprehensive Environmental Response Compensation and Liability Act, as amended:

a. To conduct investigations and surveys, including, where necessary, drilling, soil and water sampling, testpitting, and testing soil borings.

b. To inspect field activities of the Government and its contractors and subcontractors.

c. To conduct any test or survey required by the Government relating to environmental conditions on the Property, or to verify any data relating to such conditions.

d. To conduct, operate, maintain, or undertake any other response, corrective, or remedial action as required or necessary, including, without limitation, the installation of monitoring wells, pumping wells, and treatment facilities.

e. To monitor the effectiveness of engineering controls (ECs) and institutional controls (ICs).

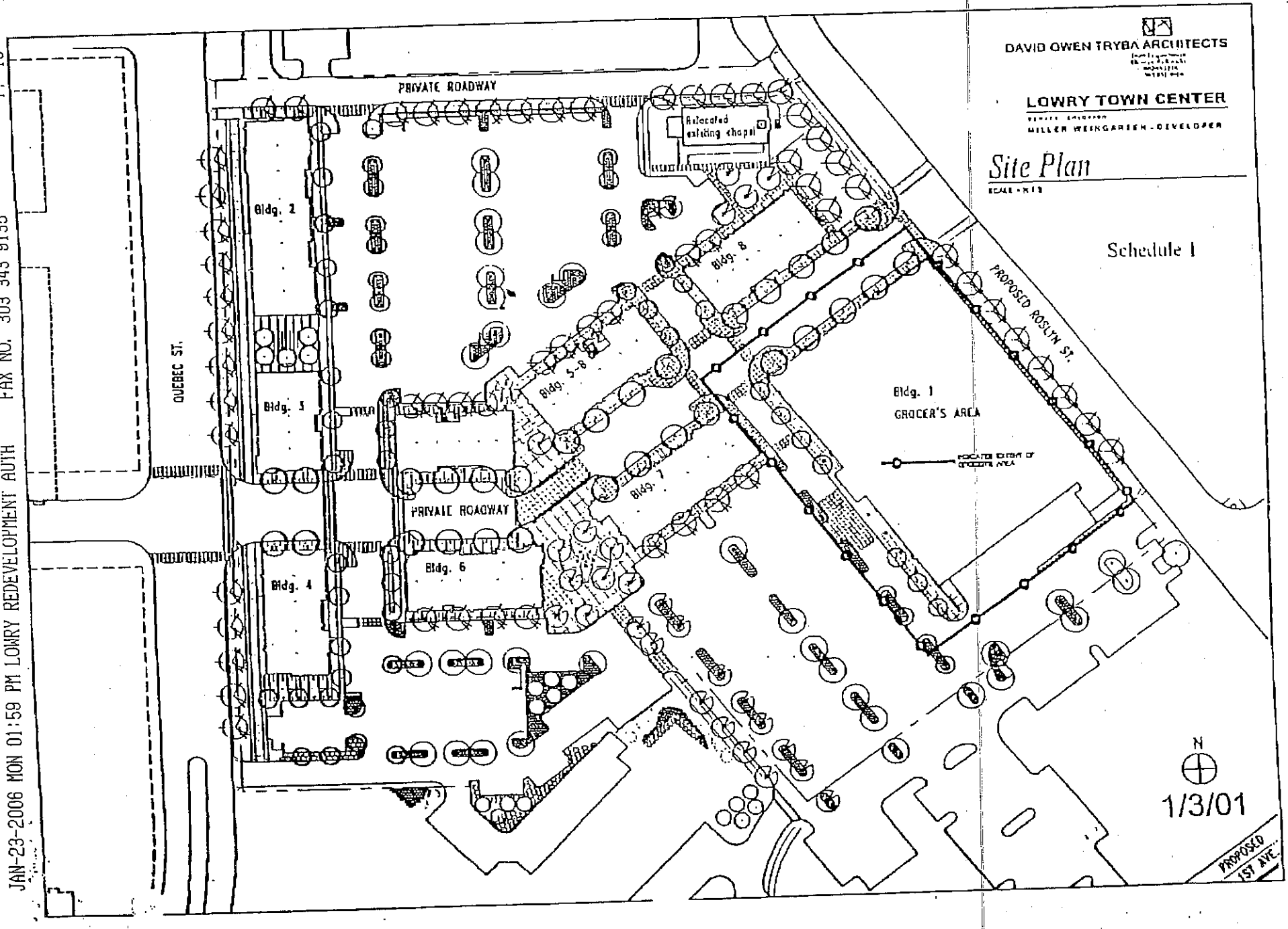
f. To enforce the protectiveness of the ICs set forth in Paragraph I herein over any occupant, owner, tenant, or subtenant of the Property.

g. To perform routine operation and maintenance of active environmental cleanup measures in place, or to repair any damage to the same.

III The exercise of the foregoing rights shall be subject to (a) the Government providing reasonable prior written notice of the exercise of one or all of said rights, and (b) the Government accommodating the use and occupancy of the Property, and the improvements then existing on the Property, including the Grocer's area (indicated on the attached Schedule 1 and hereinafter referred to in this Restrictive Use Covenant as "Grocer's area"). (c) The term "accommodating the use and occupancy of the Property, and the improvements then existing on the Property" as used herein shall mean that with respect to any such entry (i) the Government shall take all necessary measures to avoid disruption or interference

with any use, occupancy, or improvement of the Property, including, without limitation, (A) locating any and all of the activities described in Paragraph II.a. through II.e. or II.g. in an open space (parking lots, sidewalks, lawns, etc.), (B) not demolishing any structures now or hereafter located on the Property in material conformance (as that term is defined in this Restrictive Use Covenant) with the Site Plan and (C) not undertaking the activities described in Paragraph II.a. through II.e. or II.g. in the Grocer's area; (ii) based on the information available to the Government regarding the extent of environmental contamination affecting the Property as of the date of execution of this Restrictive Use Covenant, the Government will not alter, demolish, or require relocation of any of the owner's or its tenants' or subtenants' facilities for purposes of conducting environmental remediation so long as such Facilities are constructed in material conformance (as that term is defined in this Restrictive Use Covenant) with the Site Plan. (iii) based on the information available to the Government regarding the extent of environmental contamination affecting the Property as of the date of execution of this Restrictive Use Covenant, the Government shall ensure that its environmental remediation activities do not interfere with the owner's or its tenant's or subtenant's use and occupancy of all improvements now or hereafter constructed or occupied, provided the improvements have been developed in material conformance (as that term is defined in this Restrictive Use Covenant) with the Site Plan; (iv) the Government shall conduct its remediation activities in a diligent, responsible, and safe manner; (v) the Government shall keep the Property free and clear of any materials liens, mechanics' liens, *lis pendens*, or any other liens arising from its activities pursuant to this right of access; (vi) the Government shall promptly remove any equipment or remedial improvements at the conclusion of such entry onto the Property, except that the Government shall not be required to remove piping and other items below the surface which have been plugged or abandoned in accordance with applicable law, if any, or other improvements needed for continuing remediation or monitoring and which are used in accordance with the terms hereof; (vii) the Government shall restore the surface of the Property substantially to its condition immediately preceding the time of such entry; and (viii) the Government, recognizes and acknowledges its obligations under Section 330 of the National Defense Authorization Act. 1993, Pub. L. No. 102-484, as amended. (10 U.S.C. § 2687 Notes) which provides for indemnification of certain transferees of closing defense property. In accordance with Section 330, The Secretary of Defense shall hold eligible parties harmless, and defend and indemnify them in full from and against any suit, claim, demand or action, liability, judgment, cost or other fee arising out of any claim for personal injury or property damage (including death, illness, or loss of or damage to property or economic loss) that results from, or is in any way predicated upon, the release or threatened release of any hazardous substance pollutant or contaminant, or petroleum or petroleum derivative as a result of Department of Defense activities at any military installation (or portion thereof) that is closed pursuant to a base closure law. The obligations of the Government set forth in Paragraph 2 shall survive the termination of the restrictions and rights. In the event the Government breaches its obligations under Subparagraph III c.(i)-(vii),

the Government, notwithstanding anything contained in this Restrictive Use Covenant, shall be liable for all personal injury, property damage and economic loss resulting from such breach as provided in Subparagraph (viii) above;


DAVID OWEN TRYBA ARCHITECTS
LOWRY TOWN CENTER
MILLER WEINGARTEN - DEVELOPER
Site Plan
Schedule 1
PRIVATE ROADWAY
Relocated existing chapel
Bldg. 2
Bldg. 3
Bldg. 4
Bldg. 5-8
Bldg. 8
Bldg. 7
Bldg. 6
Bldg. 1
GROCER'S AREA
PRIVATE ROADWAY
QUEBEC ST.
PROPOSED ROSLYN ST.
PROPOSED 1ST AVE.
N
1/3/01

Fifth Amendment
BCA-LOW-12-95-0601

DEPARTMENT OF THE AIR FORCE

FORMER LOWRY AIR FORCE BASE, COLORADO

FIFTH AMENDMENT TO

LEASE BCA-LOW-12-95-0601

THE FIFTH AMENDMENT to Lease In Furtherance of an Economic Development Conveyance ("EDC") made this 6th day of April, 2001, between the **Secretary of the Air Force** on behalf of the United States of America, having a business address at Air Force Base Conversion Agency, 1700 N. Moore St., Suite 2300, Arlington, VA 22209-2802 (the "Air Force or Government"), and **Lowry Economic Redevelopment Authority**, having a business address at 555 Uinta Way, Denver, CO 80230 (the "Lessee").

WITNESSETH

WHEREAS, on June 30, 1995, the Air Force and the Lessee entered into a Lease (the "Lease") in furtherance of an Economic Development Conveyance (EDC), which was evidenced by an EDC Agreement of even date with the Lease (the "EDC Agreement"), for a lease term of twenty-five (25) years, unless sooner terminated in accordance with the provisions of the Lease.

WHEREAS, the Lease was amended on February 22, 1996, to remove personal property from the Lease.

WHEREAS, the Lease was amended on June 27, 1997, to extend the term from June 29, 2020, to June 28, 2045.

WHEREAS, the Lease was amended on August 24, 1999 to extend the term for a portion of the Leased Premises from June 29, 2045, to June 28, 2075, unless sooner terminated in accordance with its provisions.

WHEREAS, the Lease was amended on December 9, 1999 to modify the rent by cancellation of the remaining rent due under the Lease pursuant to the National Defense Authorization Act for Fiscal Year 2000 (Pub. L. No. 106-65) and Department of Defense No-Cost EDC Policy Guidance.

NOW THEREFORE, for the mutual promises contained in this Amendment, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Air Force and the Lessee agree that the Lease is further amended effective upon execution of this document only with respect to a portion of the Leased Premises (the "Property") described in Exhibit "A" in the following particulars and no others:

1. Add Condition 6.1.1 "The area described in Exhibit "A" (the "Property") attached hereto shall not be used for residential habitation or child care. Commercial buildings located or constructed over known groundwater contamination must contain a heating, ventilating and air conditioning system ("HVAC") which while operating is designed to provide an internal positive pressure in the building and such HVAC must be operated in accordance with normal and customary operating procedures for similar buildings in Denver, Colorado. The Site Plan

as defined below and the use of the Property for retail and office have been approved by the BCT."

2. Add Condition 10.20.5 "To monitor the effectiveness of engineering controls ("ECs") and institutional controls ("ICs")."

3. Add Condition 10.20.6 "To enforce the protectiveness of the ICs set forth herein over any occupant, owner, lessee, or sublessee of the Property."

4. Add Condition 10.20.7 "To perform routine operation and maintenance of active environmental cleanup measures in place, or to repair any damage to the same."

5. Add Condition 13.2 "The exercise of the foregoing right of access shall be subject to (a) the Government providing reasonable prior written notice of the exercise of its right of access, and (b) the Government accommodating the use and occupancy of the Property, and the improvements then existing on the Property including the Grocer's area (indicated on the attached Exhibit "B" and hereinafter referred to in this lease amendment as "Grocer's area"). The term "accommodating the use and occupancy of the Property, and the improvements then existing on the Property" as used herein shall mean that with respect to any such entry (i) the Government shall take all necessary measures to avoid disruption or interference with any use, occupancy, or improvement of the Property, including, without limitation, (A) locating any and all of the activities for environmental remediation in an open space (parking lots, sidewalks, lawns, etc.), (B) not demolishing any structures ("Structures" and/or "Facilities"), now or hereafter located on the Property in material conformance with the Site Plan, and (C) not undertaking environmental remediation activities in the Grocer's area, provided that, nothing in this Condition 13.2 shall preclude the Government from conducting non-intrusive, non-destructive monitoring activities such as air quality sampling; (ii) based on the information available to the Government regarding the extent of environmental contamination affecting the Property as of the date of execution of this lease amendment, the Government will not alter, demolish, or require relocation of any of the Lessee's or its subtenants' Facilities for purposes of conducting environmental remediation, so long as such Facilities are constructed in material conformance with the Site Plan ; (iii) based on the information available to the Government regarding the extent of environmental contamination affecting the Property as of the date of execution of this lease amendment, the Government shall ensure that its environmental remediation activities do not interfere with the Lessee's or its sublessee's use and occupancy of all improvements now or hereafter occupied including the Grocer's area, provided the improvements and the Grocer's area have been developed in material conformance with the Site Plan; (iv) the Government shall conduct its remediation activities in a diligent, responsible, and safe manner; (v) the Government shall keep the Property free and clear of any materials liens, mechanics' liens, *lis pendens*, or any other liens arising from its activities pursuant to this right of access; (vi) the Government shall promptly remove any equipment or remedial improvements at the conclusion of such entry onto the Property, except that the Government shall not be required to remove piping and other items below the surface which have been plugged or abandoned in accordance with applicable law, if any, or other improvements needed for continuing remediation or monitoring which are used or operated in accordance with the terms hereof; (vii) the Air Force shall restore the surface of the Property substantially to its condition immediately preceding the time of such entry; and (viii) the Government, recognizes and acknowledges its obligations under Section 330 of the National Defense Authorization Act, 1993, Pub. L. No. 102-484, as amended, (10

U.S.C. § 2687 Notes) which provides for indemnification of certain transferees of closing defense property. In accordance with Section 330, The Secretary of Defense shall hold eligible parties harmless, and defend and indemnify them in full from and against any suit, claim, demand or action, liability, judgment, cost or other fee arising out of any claim for personal injury or property damage (including death, illness, or loss of or damage to property or economic loss) that results from, or is in any way predicated upon, the release or threatened release of any hazardous substance pollutant or contaminant, or petroleum or petroleum derivative as a result of Department of Defense activities at any military installation (or portion thereof) that is closed pursuant to a base closure law. The obligations of the Government set forth in Condition 13.2 shall survive the termination of the restrictions and rights of access set forth above."

Changes which are in material conformance with the Site Plan are defined for purposes of the Property as "Immaterial Changes" and shall include without limitation, (a) an increase of less than (i) 10% of the original size of the building footprint as set forth in the Site Plan or (ii) 1000 square feet, whichever is greater. (b) changes in a building location of not more than twenty-five (25) feet from the original location shown in the Site Plan, (c) changes in location of landscaping and other site work, and (d) changes in the height of a building. Any change to the Site Plan which is not of a nature that is in similar size, type, and/or scope to those Immaterial Changes described above shall be defined for the purposes of the Property, as a "Material Change".

6. Add the following before the first sentence in Condition 24.1 "The following use restrictions will apply to the Lessee and any sublessees or subtenants until the Air Force provides prior written approval, in concurrence with Colorado Department of Public Health and Environment ("CDPHE"), and Environmental Protection Agency ("EPA") as necessary, that allows the restricted use to occur. Such written approval by the Air Force will not be unreasonably denied."

7. Add Condition 24.1.1 "The Lessee shall not utilize extract or consume any water from the aquifer below ground surface. Furthermore, the Lessee shall not conduct any excavation or construction activities at or below a depth of 25 feet below ground surface (or to groundwater, whichever is encountered first)."

8. Add Condition 24.1.2 "The Lessee shall not conduct irrigation of more than thirty percent (30%) of the total acreage of the Property."

9. Add Condition 24.1.3 " Lessee has submitted and the Government has approved a site plan identified as "Lowry Town Center, Denver, Colorado, Miller Weingarten – Developer, Site Plan", dated 1/3/01, and approved by the BRAC Cleanup Team ("BCT") on March 30, 2001 for the construction of a TownCenter on the Property by a sublessee of the Lessee. Such plan together with any amendments thereto which are required to be approved and have been approved pursuant hereto shall be referred to as the "Site Plan". In the event the BCT is no longer in existence at a time when some action, notice or response concerns the BCT in this lease amendment, then, upon such event, all references to the BCT shall be changed to the Government, EPA and CDPHE. Lessee or any sublessee must notify the BCT in writing and request a review of and approval of Material Changes to the Site Plan. The BCT shall make a good faith effort to review and approve changes to the Site Plan within thirty (30) days from its receipt of said notice subject however to the availability of staff and funds."

10. Add Condition 17.3.1 "Based on the information available to the Government regarding the extent of environmental contamination affecting the Property as of the date the Site Plan was approved, the Government will not alter, demolish, or require relocation of any of the Lessee's or its sublessees or subtenants' Facilities for purposes of conducting environmental remediation. In the event the Government breaches its obligations under this Condition 17.3.1, or its obligations under Condition 13.2 (b)(i) through (vii) the Government, notwithstanding anything contained in this Lease as amended hereby or as may hereafter be amended, including Condition 10.7, shall be liable for all personal injury, property damage and economic loss resulting from such breach as provided in Condition 13.2 (b)(viii)."

11. Add Condition 20.4. "In the event of any conflict between any provisions of the Restrictive Use Covenant ("RUC") executed simultaneously herewith and attached hereto as Exhibit "C" and any provisions of the Lease, including Condition 10.7, the provisions of the RUC will control. In the event of any conflict between any provisions of the RUC and any provisions of the Conveyance Documents, the provisions of the RUC will control. The RUC shall be attached to or recorded simultaneously with the Conveyance Documents for the property, in the event the RUC is still in full force and effect at the time the Conveyance Documents are executed.

12. Add Condition 17.3.2 "The Air Force as a member of the BRAC Cleanup Team ("BCT"), shall make a good faith effort to complete any review of any Material Change to the Site Plan requiring a change hereunder for construction projects located on the Property within thirty (30) days of receipt of all plans and specifications reasonably required by the BCT for its review, subject however to the availability of staff and funding. In the event problems are detected during the review, immediate notice will be provided by telephone to the Lessee or its representative designated in writing for the purpose. Approval will not be unreasonably withheld.

The Lease is amended in the above particulars only, and all other terms and conditions thereof shall remain binding and in full force and effect. This Supplemental Agreement shall henceforth be considered a part of the Lease as if fully and completely written therein.

END OF DOCUMENT
NEXT PAGE IS SIGNATURE PAGE

IN WITNESS WHEREOF I have hereunto set my hand by authority of the Secretary of the Air Force this 6 day of April, 2001.

By _____
ALBERT F. LOWAS, JR.
Director
Air Force Base Conversion Agency

COMMONWEALTH OF VIRGINIA)
) SS.:
COUNTY OF ARLINGTON)

On the 6 day of April, 2001, before me, Sonia M. Soto, the undersigned Notary Public, personally appeared Albert F. Lowas, Jr., personally known to me to be the person whose name is subscribed to the foregoing Lease, and personally known to me to be the Director, Air Force Base Conversion Agency, and acknowledged that the same was the act and deed of the Secretary of the Air Force and that he executed the same as the act of the Secretary of the Air Force.

_____
Notary Public, Commonwealth of Virginia
My Commission Expires: March 31, 2004

THIS LEASE is also executed by the Lessee this 5th day of April, 2001.

By _____
David W. Herlinger
Vice Chairman of the Board of Directors
Lowry Redevelopment Authority

Attest:
Sidney L. Papedo
Secretary/Treasurer

STATE OF COLORADO)
) ss.
CITY AND COUNTY OF DENVER)

The foregoing instrument was acknowledged before me this 5th day of April, 2001, by David W. Herlinger as Vice Chairman of the Board of Directors and Sidney L. Papedo as Secretary/Treasurer of LOWRY ECONOMIC REDEVELOPMENT AUTHORITY, a separate legal entity established pursuant to an Intergovernmental Agreement between the City and County of Denver, Colorado, and the City of Aurora, Colorado, pursuant to the provision of C.R.S. § 29-1-203(4).

Witness my hand and official seal.
My commission expires: 3/28/2005

Hallenda R Slattery
Notary Public

HALLENDA R. SLATTERY
NOTARY PUBLIC
STATE OF COLORADO
My Commission Expires 03/28/2005

Fifth Amendment
BCA-LOW-12-95-0601

Exhibit "A"
Description of Property

Exhibit A
To
Fifth Amendment to Lease

Property

THOSE PARTS OF LOT 1 AND OF LOT 2, BLOCK 1, LOWRY FILING NO. 5, CITY AND COUNTY OF DENVER, STATE OF COLORADO, DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF SAID LOT 1;
THENCE NORTH 00 DEGREES 10 MINUTES 10 SECONDS EAST ALONG THE WEST LINE OF SAID LOT 1 A DISTANCE OF 717.58 FEET TO THE NORTHWEST CORNER THEREOF;
THENCE SOUTH 89 DEGREES 49 MINUTES 50 SECONDS EAST ALONG THE NORTH LINE OF SAID LOT 1 A DISTANCE OF 513.21 FEET;
THENCE NORTH 57 DEGREES 53 MINUTES 28 SECONDS EAST CONTINUING ALONG SAID NORTH LINE A DISTANCE OF 16.50 FEET TO THE NORTHEAST CORNER OF SAID LOT 1;
THENCE SOUTHEASTERLY ALONG THE EASTERLY LINE OF SAID LOT 1, ALONG A NON-TANGENTIAL CURVE CONCAVE TO THE NORTHEAST, SAID CURVE HAVING A CENTRAL ANGLE OF 06 DEGREES 50 MINUTES 22 SECONDS, A RADIUS OF 285.00 FEET FOR AN ARC LENGTH OF 34.02 FEET (THE CHORD OF SAID CURVE BEARS SOUTH 32 DEGREES 15 MINUTES 33 SECONDS EAST, 34.00 FEET);
THENCE SOUTH 63 DEGREES 43 MINUTES 14 SECONDS WEST, 11.80 FEET;
THENCE WESTERLY ALONG A NON-TANGENTIAL CURVE CONCAVE TO THE NORTH, SAID CURVE HAVING A CENTRAL ANGLE OF 18 DEGREES 15 MINUTES 46 SECONDS, A RADIUS OF 35.03 FEET FOR AN ARC LENGTH OF 11.17 FEET (THE CHORD OF SAID CURVE BEARS SOUTH 79 DEGREES 28 MINUTES 58 SECONDS WEST, 11.12 FEET);
THENCE SOUTH 90 DEGREES 00 MINUTES 00 SECONDS WEST, 98.75 FEET;
THENCE SOUTHWESTERLY AND SOUTHERLY ALONG A TANGENTIAL CURVE CONCAVE TO THE SOUTHEAST, SAID CURVE HAVING A CENTRAL ANGLE OF 90 DEGREES 00 MINUTES 00 SECONDS, A RADIUS OF 25.00 FEET FOR AN ARC LENGTH OF 39.27 FEET;
THENCE SOUTH 00 DEGREES 00 MINUTES 00 SECONDS WEST, TANGENT TO SAID CURVE 43.80 FEET;
THENCE SOUTHEASTERLY AND EASTERLY ALONG A TANGENTIAL CURVE CONCAVE TO THE NORTHEAST, SAID CURVE HAVING A CENTRAL ANGLE OF 90 DEGREES 00 MINUTES 00 SECONDS, A RADIUS OF 10.00 FEET FOR AN ARC LENGTH OF 15.71 FEET;
THENCE NORTH 90 DEGREES 00 MINUTES 00 SECONDS EAST, TANGENT TO SAID CURVE, 34.95 FEET;
THENCE SOUTH 36 DEGREES 28 MINUTES 38 SECONDS EAST, 59.76 FEET;
THENCE NORTH 53 DEGREES 31 MINUTES 22 SECONDS EAST, 79.04 FEET;
THENCE NORTH 36 DEGREES 28 MINUTES 38 SECONDS WEST, 30.28 FEET;
THENCE NORTH 53 DEGREES 31 MINUTES 22 SECONDS EAST, 52.76 FEET TO THE EASTERLY LINE OF SAID LOT 1;
THENCE SOUTH 36 DEGREES 28 MINUTES 38 SECONDS EAST, ALONG SAID EASTERLY LINE 538.67 FEET TO THE MOST EASTERLY CORNER OF SAID LOT 1;
THENCE SOUTH 53 DEGREES 40 MINUTES 30 SECONDS WEST ALONG THE SOUTHERLY LINE OF SAID LOT 1 AND ITS SOUTHWESTERLY EXTENSION (ALSO BEING THE NORTHERLY LINES OF LOT 3 AND LOT 4 OF SAID LOWRY FILING NO. 5) A DISTANCE OF 436.09 FEET;
THENCE NORTH 36 DEGREES 28 MINUTES 38 SECONDS WEST, 169.64 FEET;
THENCE SOUTH 53 DEGREES 31 MINUTES 29 SECONDS WEST, 99.52 FEET;
THENCE NORTH 44 DEGREES 55 MINUTES 22 SECONDS WEST, 6.17 FEET;
THENCE SOUTH 45 DEGREES 05 MINUTES 46 SECONDS WEST, 141.44 FEET;
THENCE WESTERLY ALONG A TANGENTIAL CURVE CONCAVE TO THE NORTH, SAID CURVE HAVING A CENTRAL ANGLE OF 90 DEGREES 07 MINUTES 07 SECONDS, A RADIUS OF 8.50 FEET FOR AN ARC LENGTH OF 13.37 FEET;
THENCE NORTH 44 DEGREES 47 MINUTES 07 SECONDS WEST, 29.95 FEET;

THENCE NORTHERLY ALONG A TANGENTIAL CURVE CONCAVE TO THE NORTHEAST, SAID CURVE HAVING A CENTRAL ANGLE OF 44 DEGREES 47 MINUTES 07 SECONDS, A RADIUS OF 8.50 FEET FOR AN ARC LENGTH OF 6.64 FEET;
THENCE NORTH 00 DEGREES 00 MINUTES 00 SECONDS EAST, 17.09 FEET TO THE INTERSECTION WITH THE EASTERLY EXTENSION OF THE SOUTH LINE OF SAID LOT 1;
THENCE NORTH 89 DEGREES 49 MINUTES 50 SECONDS WEST ALONG SAID EXTENSION AND LINE, 218.51 FEET TO THE POINT OF BEGINNING.

Fifth Amendment
BCA-LOW-12-95-0601

Exhibit "B"
Depiction of Grocer's Area

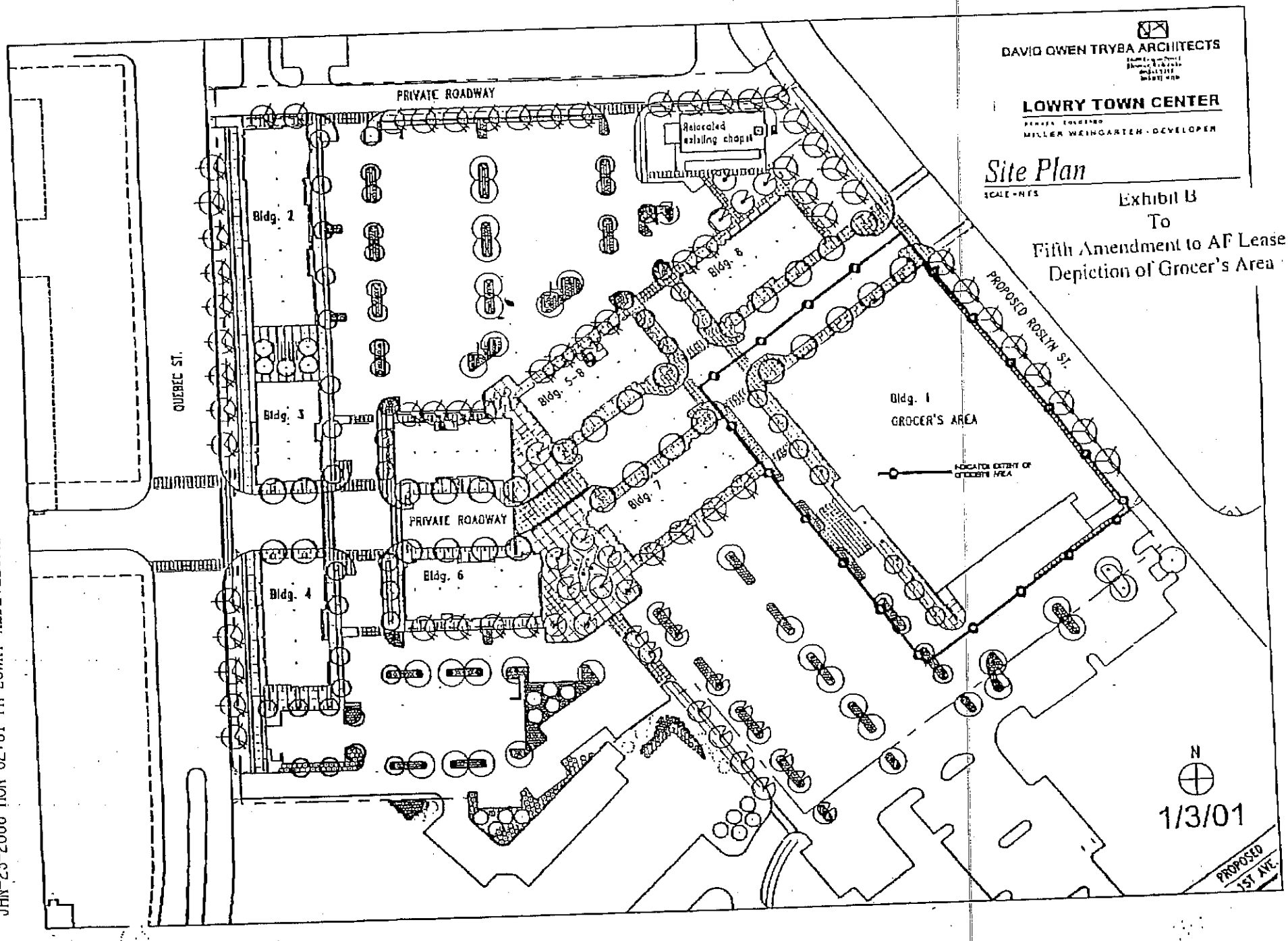


Exhibit "C"
Restrictive Use Covenant

EXHIBIT C

To

Fifth Amendment to AF Lease

RESTRICTIVE USE COVENANT

This Restrictive Use Covenant is made this ____ day of _____, 2001, by the LOWRY ECONOMIC REDEVELOPMENT AUTHORITY, a separate legal entity established pursuant to an Intergovernmental Agreement between the City and County of Denver, Colorado, and the City of Aurora, Colorado, pursuant to the provision of C.R.S. § 29-1-203(4) ("LRA"), and the SECRETARY OF THE AIR FORCE, on behalf of the United States of America ("Air Force or Government"), and WEINGARTEN/MILLER/LOWRY JOINT VENTURE, a Texas joint venture ("MW") and ALBERTSON'S, INC., a Delaware Corporation, (Albertson's).

Recitals

A. Pursuant to its authority under the Defense Base Closure and Realignment Act of 1990 to dispose of the real property and related personal property comprising the former Lowry Air Force Base ("Lowry AFB"), Air Force has entered into an Agreement for Economic Development Conveyance with LRA, dated June 30, 1995, as amended (the "EDC Agreement") and other agreements described in the EDC Agreement.

B. Pending conveyance by deed of the property identified in the EDC Agreement, LRA and the Air Force have entered into that certain Department of the Air Force Lease of Property on Lowry Air Force Base, Colorado, dated June 30, 1995, as amended (the " Air Force Lease"), a memorandum of which was recorded January 8, 1997, under Reception No. 9700003185 of the records of the Clerk and Recorder of the City and County of Denver, Colorado. Pursuant to the Air Force Lease, LRA was granted possession of the property described in the aforementioned memorandum ("EDC Property") and the right to use, redevelop, operate, and maintain it, subject to and in accordance with all of the terms and conditions contained in the EDC Agreement, the Air Force Lease, and the other documents described in the EDC Agreement (collectively the "Air Force Documents").

C. In furtherance of the authority and powers granted to LRA under the Air Force Documents, the LRA has entered into an Agreement to Lease and Sell property located within the EDC Property with MW, which property is described on **Exhibit "A"**, which is attached hereto and incorporated herein by this reference (the "Property").

D. MW intends to develop a retail shopping center and commercial offices on the Property.

E. Albertson's, pursuant to a sublease with MW, intends to develop a grocery store on a portion of the Property.

F. The parties hereto desire to place certain restrictions on the use of the Property, which restrictions will be in effect until the Air Force completes to the satisfaction of

Colorado Department of Public Health and Environment ("CDPHE") and the Air Force certain remedial environmental measures, and to evidence these restrictions the parties are executing this Restrictive Use Covenant.

NOW, THEREFORE, the parties do hereby publish and declare that the Property shall be held, sold, leased, and conveyed subject to the following restrictions, covenants, terms, conditions, and agreements which shall run with the Property and be binding on all parties having any right, title, or interest in the Property, or any part thereof, their heirs, personal representatives, successors, and assigns.

1. On behalf of themselves and their successors, the parties hereto adopt and agree to be bound by the Restrictive Covenants ("Restrictions") set forth on **Exhibit "B"** attached hereto and incorporated herein by this reference.

2. The Restrictions shall remain in place until the Air Force determines, in concurrence with CDPHE, that such Restrictions are no longer necessary to protect human health and the environment and to protect the Air Force's environmental remedial activities. The Air Force agrees to sign a release after a determination is made that such Restrictions are no longer necessary.

3. Observance of the covenants contained in this Restrictive Use Covenant shall be assured by the Air Force and shall be enforced by the Air Force by an action for specific performance, injunction, or such other remedies available at law or in equity. If any action is filed to enforce the terms hereof, the prevailing party shall be awarded its reasonable attorneys' fees and costs.

4. MW submitted and the Government has approved a site plan identified as "Lowry Town Center, Denver, Colorado, Miller Weingarten – Developer, Site Plan", dated 1/3/01, and approved by the BRAC Cleanup Team ("BCT") on March 30, 2001 for the construction of a TownCenter on the Property. Such plan together with any amendments thereto which are required to be approved and have been approved pursuant hereto shall be referred to as the Site Plan. In the event the BCT is no longer in existence at a time when some action, notice or response concerns the BCT in this Restrictive Use Covenant, then, upon such event, all references to the BCT shall be changed to the Air Force, Environmental Protection Agency and CDPHE. MW must notify the BCT in writing and request a review of and approval of any Material Changes to the Site Plan. The Government as a member of the BCT shall make a good faith effort to review and approve changes to the Site Plan within thirty (30) days from its receipt of said notice subject however to the availability of staff and funds.

5 Based on information presently available to the Government regarding the extent of contamination affecting the Property as of the date hereof, the Air Force agrees that it will place no further restrictions on the use of the Property or any buildings constructed in material conformance with the Site Plan.

Changes which are in material conformance with the Site Plan are defined for purposes of the Property as "Immaterial Changes" and shall include without

limitation, (a) an increase of less than (i) 10% of the original size of the building footprint as set forth in the Site Plan or (ii) 1000 square feet, whichever is greater, (b) changes in a building location of not more than twenty-five (25) feet from the original location shown in the Site Plan, (c) changes in location of landscaping and other site work, and (d) changes in the height of a building. Any change to the Site Plan which is not of a nature that is in similar size, type, and/or scope to those Immaterial Changes described above shall be defined for the purposes of the Property, as a "Material Change".

6. At the time that title to the Property is transferred by the Government to the LRA, this Restrictive Use Covenant shall be recorded in the records of the Clerk and Recorder of the City and County of Denver, Colorado.

IN WITNESS WHEREOF, the parties have executed this Restrictive Use Covenant as of the day and year first above written.

LOWRY ECONOMIC REDEVELOPMENT AUTHORITY, a separate legal entity established pursuant to an Intergovernmental Agreement between the City and County of Denver, Colorado, and the City of Aurora, Colorado, pursuant to the provision of C.R.S. § 29-1-203(4)

_____

By Thomas O. Markham, Executive Director

STATE OF COLORADO)
) ss.
CITY ANDCOUNTY OF DENVER)

The foregoing instrument was acknowledged before me this ____ day of _____, 2001, by Thomas O. Markham as Executive Director of LOWRY ECONOMIC REDEVELOPMENT AUTHORITY, a separate legal entity established pursuant to an Intergovernmental Agreement between the City and County of Denver, Colorado, and the City of Aurora, Colorado, pursuant to the provision of C.R.S. § 29-1-203(4).

Witness my hand and official seal.
My commission expires: _____

_____

Notary Public

SECRETARY OF THE AIR FORCE

_____

Albert F. Lowas, Jr., Director
Air Force Base Conversion Agency

COMMONWEALTH OF VIRGINIA)
) ss
COUNTY OF ARLINGTON)

On the ____ day of _____, 2001, before me, _____, the undersigned Notary Public, personally appeared Albert F. Lowas, Jr., personally known to me to be the person whose name is subscribed to the foregoing Restrictive Use Covenant, and personally known to me to be the Director, Air Force Base Conversion Agency, and acknowledged that the same was the act and deed of the Secretary of the Air Force and that he executed the same as the act of the Secretary of the Air Force.

GIVEN under my hand and official seal and office, this the _____ day of _____, 2001.

_____

Notary Public
Commonwealth of Virginia

My commission expires:_____

SEAL

WEINGARTEN/MILLER/LOWRY JOINT VENTURE, a Texas joint venture

By Miller Lowry LLC, a Colorado limited liability company, joint venturer

By_____

Title _____

STATE OF COLORADO)
) ss.
COUNTY OF)

The foregoing instrument was acknowledged before me this ____ day of _____, 2001, by _____ as _____ of Miller Lowry LLC, a Colorado limited liability company, joint venturer of WEINGARTEN/MILLER/LOWRY JOINT VENTURE, a Texas joint venture.

Witness my hand and official seal.

My commission expires: _____

_____
Notary Public

ALBERTSON'S, INC., a Delaware corporation

By_____

Title_____

STATE OF IDAHO)
) ss.
COUNTY OF)

The foregoing instrument was acknowledged before me this ____ day of _____, 2001, by _____ as _____ of Albertson's, Inc., a Delaware corporation

Witness my hand and official seal.

My commission expires: _____

_____
Notary Public

EXHIBIT A

Description of the Property

Exhibit A
To
Restrictive Use Covenant

Property

THOSE PARTS OF LOT 1 AND OF LOT 2, BLOCK 1, LOWRY FILING NO. 5, CITY AND COUNTY OF DENVER, STATE OF COLORADO, DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF SAID LOT 1;
THENCE NORTH 00 DEGREES 10 MINUTES 10 SECONDS EAST ALONG THE WEST LINE OF SAID LOT 1 A DISTANCE OF 717.58 FEET TO THE NORTHWEST CORNER THEREOF;
THENCE SOUTH 89 DEGREES 49 MINUTES 50 SECONDS EAST ALONG THE NORTH LINE OF SAID LOT 1 A DISTANCE OF 513.21 FEET;
THENCE NORTH 57 DEGREES 53 MINUTES 28 SECONDS EAST CONTINUING ALONG SAID NORTH LINE A DISTANCE OF 16.50 FEET TO THE NORTHEAST CORNER OF SAID LOT 1;
THENCE SOUTHEASTERLY ALONG THE EASTERLY LINE OF SAID LOT 1, ALONG A NON-TANGENTIAL CURVE CONCAVE TO THE NORTHEAST, SAID CURVE HAVING A CENTRAL ANGLE OF 06 DEGREES 50 MINUTES 22 SECONDS, A RADIUS OF 285.00 FEET FOR AN ARC LENGTH OF 34.02 FEET (THE CHORD OF SAID CURVE BEARS SOUTH 32 DEGREES 15 MINUTES 33 SECONDS EAST, 34.00 FEET);
THENCE SOUTH 63 DEGREES 43 MINUTES 14 SECONDS WEST, 11.80 FEET;
THENCE WESTERLY ALONG A NON-TANGENTIAL CURVE CONCAVE TO THE NORTH, SAID CURVE HAVING A CENTRAL ANGLE OF 18 DEGREES 15 MINUTES 46 SECONDS, A RADIUS OF 35.03 FEET FOR AN ARC LENGTH OF 11.17 FEET (THE CHORD OF SAID CURVE BEARS SOUTH 79 DEGREES 28 MINUTES 58 SECONDS WEST, 11.12 FEET);
THENCE SOUTH 90 DEGREES 00 MINUTES 00 SECONDS WEST, 98.75 FEET;
THENCE SOUTHWESTERLY AND SOUTHERLY ALONG A TANGENTIAL CURVE CONCAVE TO THE SOUTHEAST, SAID CURVE HAVING A CENTRAL ANGLE OF 90 DEGREES 00 MINUTES 00 SECONDS, A RADIUS OF 25.00 FEET FOR AN ARC LENGTH OF 39.27 FEET;
THENCE SOUTH 00 DEGREES 00 MINUTES 00 SECONDS WEST, TANGENT TO SAID CURVE 43.80 FEET;
THENCE SOUTHEASTERLY AND EASTERLY ALONG A TANGENTIAL CURVE CONCAVE TO THE NORTHEAST, SAID CURVE HAVING A CENTRAL ANGLE OF 90 DEGREES 00 MINUTES 00 SECONDS, A RADIUS OF 10.00 FEET FOR AN ARC LENGTH OF 15.71 FEET;
THENCE NORTH 90 DEGREES 00 MINUTES 00 SECONDS EAST, TANGENT TO SAID CURVE, 34.95 FEET;
THENCE SOUTH 36 DEGREES 28 MINUTES 38 SECONDS EAST, 59.76 FEET;
THENCE NORTH 53 DEGREES 31 MINUTES 22 SECONDS EAST, 79.04 FEET;
THENCE NORTH 36 DEGREES 28 MINUTES 38 SECONDS WEST, 30.28 FEET;
THENCE NORTH 53 DEGREES 31 MINUTES 22 SECONDS EAST, 52.76 FEET TO THE EASTERLY LINE OF SAID LOT 1;
THENCE SOUTH 36 DEGREES 28 MINUTES 38 SECONDS EAST, ALONG SAID EASTERLY LINE 538.67 FEET TO THE MOST EASTERLY CORNER OF SAID LOT 1;
THENCE SOUTH 53 DEGREES 40 MINUTES 30 SECONDS WEST ALONG THE SOUTHERLY LINE OF SAID LOT 1 AND ITS SOUTHWESTERLY EXTENSION (ALSO BEING THE NORTHERLY LINES OF LOT 3 AND LOT 4 OF SAID LOWRY FILING NO. 5) A DISTANCE OF 436.09 FEET;
THENCE NORTH 36 DEGREES 28 MINUTES 38 SECONDS WEST, 169.64 FEET;
THENCE NORTH 53 DEGREES 31 MINUTES 29 SECONDS WEST, 99.52 FEET;
THENCE SOUTH 53 DEGREES 31 MINUTES 22 SECONDS WEST, 6.17 FEET;
THENCE NORTH 44 DEGREES 55 MINUTES 22 SECONDS WEST, 141.44 FEET;
THENCE SOUTH 45 DEGREES 05 MINUTES 46 SECONDS WEST, 141.44 FEET;
THENCE WESTERLY ALONG A TANGENTIAL CURVE CONCAVE TO THE NORTH, SAID CURVE HAVING A CENTRAL ANGLE OF 90 DEGREES 07 MINUTES 07 SECONDS, A RADIUS OF 8.50 FEET FOR AN ARC LENGTH OF 13.37 FEET;
THENCE NORTH 44 DEGREES 47 MINUTES 07 SECONDS WEST, 29.95 FEET;

THENCE NORTHERLY ALONG A TANGENTIAL CURVE CONCAVE TO THE NORTHEAST, SAID CURVE HAVING A CENTRAL ANGLE OF 44 DEGREES 47 MINUTES 07 SECONDS, A RADIUS OF 8.50 FEET FOR AN ARC LENGTH OF 6.64 FEET;
THENCE NORTH 00 DEGREES 00 MINUTES 00 SECONDS EAST, 17.09 FEET TO THE INTERSECTION WITH THE EASTERLY EXTENSION OF THE SOUTH LINE OF SAID LOT 1;
THENCE NORTH 89 DEGREES 49 MINUTES 50 SECONDS WEST ALONG SAID EXTENSION AND LINE, 218.51 FEET TO THE POINT OF BEGINNING.

EXHIBIT B

Restrictive Covenants

The obligations set forth below shall be binding on the United States of America, and any and all occupants, tenants, subtenants, and successors of the current owner.

I. The LRA, Albertson's, and MW by acceptance of this Restrictive Use Covenant, covenant and agree for themselves, their successors and assigns that activities in subparagraphs 1(a), 1(b), 1(c), 1(d), 1(e), 1(f) and 1 (g) shall not be permitted on the Property unless: (i) the restrictions set forth in this paragraph have terminated pursuant to Paragraph 2 of the Restrictive Use Covenant to which this exhibit is attached; or (ii) the Property owner or lessee or its tenants or subtenants has obtained all necessary state and federal permits and prior written approval from the Department of the Air Force after concurrence of the Colorado Department of Public Health and Environment ("CDPHE") and the Environmental Protection Agency ("EPA") to permit a prohibited use or activity. The costs associated with obtaining the approval necessary to authorize a prohibited use or activity, including the cost of any studies, analysis or remediation required to obtain such approval, shall be the sole responsibility of the Property owner or lessee or its tenants or subtenants, without any cost whatsoever to the United States.

a. Residential habitation of the Property.

b. Commercial buildings located or constructed over known groundwater contamination must contain a heating, ventilating and air conditioning system ("HVAC") which while operating is designed to provide an internal positive pressure in the building and such HVAC must be operated in accordance with normal and customary operating procedures for similar buildings in Denver, Colorado.

c. Child care;

d. Excavation or construction activities at or below a depth of 25 feet below existing ground surface (or to groundwater, whichever is encountered first);

e. Utilization, extraction, or consumption of any water from the aquifer below ground surface of the Property;

f. Irrigation of more than thirty percent (30%) of the total acreage of the Property; or

g. Activities that would interfere with or disrupt required remedial investigations, response actions or oversight activities that are permitted pursuant to this Restrictive Use Covenant.

II. Until such time as the Restrictions set forth in Paragraph 1 have terminated pursuant to Paragraph 2 of the Restrictive Use Covenant to which this exhibit is attached, the United States of America, acting through the Department of Air Force or the Environmental Protection Agency, and their respective officials, agents, employees, contractors, and subcontractors (collectively the "Government"), subject to the qualifications set forth below, shall retain the right of access to the Property, including the right of access to, and use of, utilities at the Government's expense for only the following purposes, either on the Property or on adjoining lands, and for such other purposes related to obligations arising under Section 120 of the Comprehensive Environmental Response Compensation and Liability Act, as amended:

a. To conduct investigations and surveys, including, where necessary, drilling, soil and water sampling, testpitting, and testing soil borings.

b. To inspect field activities of the Government and its contractors and subcontractors.

c. To conduct any test or survey required by the Government relating to environmental conditions on the Property, or to verify any data relating to such conditions.

d. To conduct, operate, maintain, or undertake any other response, corrective, or remedial action as required or necessary, including, without limitation, the installation of monitoring wells, pumping wells, and treatment facilities.

e. To monitor the effectiveness of engineering controls (ECs) and institutional controls (ICs).

f. To enforce the protectiveness of the ICs set forth in Paragraph I herein over any occupant, owner, tenant, or subtenant of the Property.

g. To perform routine operation and maintenance of active environmental cleanup measures in place, or to repair any damage to the same.

III The exercise of the foregoing rights shall be subject to (a) the Government providing reasonable prior written notice of the exercise of one or all of said rights, and (b) the Government accommodating the use and occupancy of the Property, and the improvements then existing on the Property, including the Grocer's area (indicated on the attached Schedule 1 and hereinafter referred to in this Restrictive Use Covenant as "Grocer's area"), (c) The term "accommodating the use and occupancy of the Property, and the improvements then existing on the Property" as used herein shall mean that with respect to any such entry (i) the Government shall take all necessary measures to avoid disruption or interference

with any use, occupancy, or improvement of the Property, including, without limitation, (A) locating any and all of the activities described in Paragraph II.a. through II.e. or II.g. in an open space (parking lots, sidewalks, lawns, etc.), (B) not demolishing any structures now or hereafter located on the Property in material conformance (as that term is defined in this Restrictive Use Covenant) with the Site Plan and (C) not undertaking the activities described in Paragraph II.a. through II.e. or II.g. in the Grocer's area; (ii) based on the information available to the Government regarding the extent of environmental contamination affecting the Property as of the date of execution of this Restrictive Use Covenant, the Government will not alter, demolish, or require relocation of any of the owner's or its tenants' or subtenants' facilities for purposes of conducting environmental remediation so long as such Facilities are constructed in material conformance (as that term is defined in this Restrictive Use Covenant) with the Site Plan. (iii) based on the information available to the Government regarding the extent of environmental contamination affecting the Property as of the date of execution of this Restrictive Use Covenant, the Government shall ensure that its environmental remediation activities do not interfere with the owner's or its tenant's or subtenant's use and occupancy of all improvements now or hereafter constructed or occupied, provided the improvements have been developed in material conformance (as that term is defined in this Restrictive Use Covenant) with the Site Plan; (iv) the Government shall conduct its remediation activities in a diligent, responsible, and safe manner; (v) the Government shall keep the Property free and clear of any materials liens, mechanics' liens, *lis pendens*, or any other liens arising from its activities pursuant to this right of access; (vi) the Government shall promptly remove any equipment or remedial improvements at the conclusion of such entry onto the Property, except that the Government shall not be required to remove piping and other items below the surface which have been plugged or abandoned in accordance with applicable law, if any, or other improvements needed for continuing remediation or monitoring and which are used in accordance with the terms hereof; (vii) the Government shall restore the surface of the Property substantially to its condition immediately preceding the time of such entry; and (viii) the Government, recognizes and acknowledges its obligations under Section 330 of the National Defense Authorization Act. 1993, Pub. L. No. 102-484, as amended, (10 U.S.C. § 2687 Notes) which provides for indemnification of certain transferees of closing defense property. In accordance with Section 330, The Secretary of Defense shall hold eligible parties harmless, and defend and indemnify them in full from and against any suit, claim, demand or action, liability, judgment, cost or other fee arising out of any claim for personal injury or property damage (including death, illness, or loss of or damage to property or economic loss) that results from, or is in any way predicated upon, the release or threatened release of any hazardous substance pollutant or contaminant, or petroleum or petroleum derivative as a result of Department of Defense activities at any military installation (or portion thereof) that is closed pursuant to a base closure law. The obligations of the Government set forth in Paragraph 2 shall survive the termination of the restrictions and rights. In the event the Government breaches its obligations under Subparagraph III c.(i)-(vii),

the Government, notwithstanding anything contained in this Restrictive Use Covenant, shall be liable for all personal injury, property damage and economic loss resulting from such breach as provided in Subparagraph (viii) above;

DAVID OWEN TRYBA ARCHITECTS
LOWRY TOWN CENTER
MILLER WEINGARTEN - DEVELOPER
Site Plan
Schedule 1
1/3/01
PROPOSED ROSLYN ST.
PROPOSED 1ST AVE.
Bldg. 1
GROCER'S AREA
INDICATES EXTENT OF CANOPIES AREA
Relocated existing chapel
Bldg. 8
Bldg. 7
Bldg. 5-8
PRIVATE ROADWAY
PRIVATE ROADWAY
Bldg. 2
Bldg. 3
Bldg. 4
Bldg. 6
QUEBEC ST.

DEPARTMENT OF THE AIR FORCE

FORMER LOWRY AIR FORCE BASE, COLORADO

SEVENTH AMENDMENT TO

LEASE BCA-LOW-12-95-0601

THE SEVENTH AMENDMENT to Lease In Furtherance of an Economic Development Conveyance ("EDC") made this 15th day of June, 2001, between the **Secretary of the Air Force** on behalf of the United States of America, having a business address at Air Force Base Conversion Agency, 1700 N. Moore St., Suite 2300, Arlington, VA 22209-2802 (the "Air Force or Government"), and **Lowry Economic Redevelopment Authority**, having a business address at 555 Uinta Way, Denver, CO 80230 (the "Lessee").

WITNESSETH

WHEREAS, on June 30, 1995, the Air Force and the Lessee entered into a Lease (the "Lease") in furtherance of an Economic Development Conveyance (EDC), which was evidenced by an EDC Agreement of even date with the Lease (the "EDC Agreement"), for a lease term of twenty-five (25) years, unless sooner terminated in accordance with the provisions of the Lease.

WHEREAS, the Lease was amended on February 22, 1996, to remove personal property from the Lease.

WHEREAS, the Lease was amended on June 27, 1997, to extend the term from June 29, 2020, to June 28, 2045.

WHEREAS, the Lease was amended on August 24, 1999 to extend the term for a portion of the Leased Premises from June 29, 2045, to June 28, 2075, unless sooner terminated in accordance with its provisions.

WHEREAS, the Lease was amended on December 9, 1999 to modify the rent by cancellation of the remaining rent due under the Lease pursuant to the National Defense Authorization Act for Fiscal Year 2000 (Pub. L. No. 106-65) and Department of Defense No-Cost EDC Policy Guidance.

WHEREAS, the Lease was amended on April 6, 2001 to provide for certain use restrictions on a portion of the Leased Premises and to restrict the activities of the Air Force with respect to its environmental remediation activities on said portion of the Leased Premises.

WHEREAS, the Lease was amended on June 6, 2001 to add new property to the Leased Premises.

NOW THEREFORE, for the mutual promises contained in this Amendment, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Air Force and the Lessee agree that the Lease is further amended effective upon execution of this document only with respect to a portion of the Leased Premises (the "Property") described in Exhibit "A" in the following particulars and no others:

1. Condition 10.4 is amended by adding the following sentence:

"Notwithstanding the foregoing, the Air Force shall have no right to inspect the interior of any building on the Property."

2. Condition 11 is amended by adding the following sentence:
"Notwithstanding the foregoing, the provisions of this Condition 11 shall not pertain to the interior of any improvements on the Property."

3. Condition 13.1 is amended by adding the following sentence:
"Notwithstanding the foregoing, the provisions of this Condition 13.1 shall not pertain to the interior of any improvements on the Property."

4. Condition 15.2.2 is amended by changing the required limits of general liability insurance from Ten Million and No/100 Dollars ($10,000,000.00) to Two Million and No/100 Dollars ($2,000,000.00).

5. Condition 15 is amended by adding a new Condition 15.8 as follows:
"15.8 Notwithstanding the foregoing, any sublessee of the Property having a net worth of Fifty Million and No/100 Dollars ($50,000,000.00) or more may self insure any of the insurance required by this Conditions 15 with the exception of any insurance required to be provide by the laws of the State of Colorado by a licensed insurance company."

6. Condition 23 is amended by the addition of the following:
"23.12. Form of Deed. The Deed given to the Lessee by the Air Force for the Property shall have the RUC attached to and incorporated into it and shall contain the following statement. "The terms of the Restrictive Use Covenant ("RUC"), which is attached hereto as Exhibit C and incorporated herein by this reference, shall be binding upon the Air Force and in the event of any conflict between the terms of this Deed and the terms of the RUC. the terms of the RUC shall control."

The Lease is amended in the above particulars only, and all other terms and conditions thereof shall remain binding and in full force and effect. This Supplemental Agreement shall henceforth be considered a part of the Lease as if fully and completely written therein.

END OF DOCUMENT
NEXT PAGE IS SIGNATURE PAGE

IN WITNESS WHEREOF I have hereunto set my hand by authority of the Secretary of the Air Force this 15th day of June, 2001.

By _____
JOYCE K. FRANK
Deputy Director
Air Force Base Conversion Agency

COMMONWEALTH OF VIRGINIA)
) SS.:
COUNTY OF ARLINGTON)

On the 15th day of June, 2001, before me, Sonia M. Soto, the undersigned Notary Public, personally appeared Joyce K. Frank, personally known to me to be the person whose name is subscribed to the foregoing Lease, and personally known to me to be the Deputy Director, Air Force Base Conversion Agency, and acknowledged that the same was the act and deed of the Secretary of the Air Force and that she executed the same as the act of the Secretary of the Air Force.

_____
Notary Public, Commonwealth of Virginia
My Commission Expires: March 31, 2004

THIS LEASE is also executed by the Lessee this 21st day of June, 2001.

By: _____
Bruce F. Heitler
Chairman of the Board of Directors
Lowry Economic Redevelopment Authority

Attest:
_____
Sidney L. Papedo
Secretary/Treasurer

Seventh Amendment
BCA-LOW-12-95-0601

STATE OF COLORADO)
) ss.
CITY AND COUNTY OF DENVER)

The foregoing instrument was acknowledged before me this 21st day of June, 2001, by Bruce F. Heitler as Chairman of the Board of Directors and Sidney L. Papedo as Secretary/Treasurer of LOWRY ECONOMIC REDEVELOPMENT AUTHORITY, a separate legal entity established pursuant to an Intergovernmental Agreement between the City and County of Denver, Colorado, and the City of Aurora, Colorado, pursuant to the provision of C.R.S. § 29-1-203(4).

Witness my hand and official seal.
My commission expires: October 15, 2001

Erina J. Lindholm
Notary Public

Exhibit "A"
Description of Property

CLOSING DOCUMENTS

SELLER: LOWRY ECONOMIC REDEVELOPMENT AUTHORITY
PURCHASER: WEINGARTEN/MILLER/LOWRY JOINT VENTURE
CLOSING DATE: July 3, 2001
PROPERTY: LOWRY TOWN CENTER

CONTRACT DOCUMENTS

1. Agreement to Lease and Sell – 2 originals
2. Assignment and Assumption of Agreement to Lease and Sell
3. First through Ninth Amendments to Agreement to Lease and Sell
4. Tenth Amendment to Agreement to Lease and Sell
5. Air Force Base Conversion Agency letter re remediation
6. Allied letter agreement re release of property
7. American Legion letter agreement re improvements to property
8. Stanley British letter agreement re removal of trees/improvements
9. Colorado Housing and Finance Authority letter agreement re parking

AIR FORCE DOCUMENTS CONCERNING ENVIRONMENTAL MATTERS

10. Colorado Department of Public Health and Environment "Comfort Letter"
11. Air Force Base Conversion Agency "Site Plan Approval Letter"
12. Restrictive Use Covenant
13. Third Amendment to Air Force Lease – extending lease term on Town Center site
14. Fifth Amendment to Air Force Lease – providing for restrictions on use and Air Force environmental activity on Town Center site
15. Seventh Amendment to Air Force Lease – providing for restrictions on Air Force environmental activity on Albertsons site

TRANSACTION DOCUMENTS

16. Sublease
17. Memorandum of Sublease
18. Escrow Agreement
19. Special Warranty Deed
20. Development Agreement
21. Nondisturbance and Attornment Agreement – 3 party
22. Nondisturbance and Attornment Agreement – 4 Party
23. Nondisturbance and Attornment Agreement -
24. Environmental Indemnity Agreement – original
25. Relinquishment of Surface Rights
26. Closing Memorandum
27. Ratification of Allied Access Easement
28. Easement Termination Letter
29. Air Force Deed Form
30. Easement and Indemnity Agreement
31. Hold Harmless and Indemnity Agreement
32. Plat easement vacation
33. Lease Certification Letter
34. Service Vehicle Access Letter
35. Chapel work letter

EASEMENTS

36. Declaration of Access Easement (Stanley British)
37. Declaration of Reciprocal Access and Parking Easement (Chapel)
38. Declaration of Reciprocal Access and Parking Easement (American Legion)
39. Declaration of Parking and Reciprocal Access Easement (Building 385 site)
40. Declaration of Access Easement (Town Center to Allied)
41. Declaration of Reciprocal Access Easement (Five properties)

ANCHOR TENANT DOCUMENTS

42. Shopping Center Ground Sublease
43. Memorandum of Shopping Center Ground Sublease
44. Common Area Maintenance Agreement
45. Consent of United States of American to Common Area Maintenance Agreement
46. Declaration of Restrictions and Grant of Easements
47. Consent of United States of America to Declaration of Restrictions and Grant of Easements
48. Development Agreement between Weingarten/Miller/Lowry Joint Venture and Albertson's, Inc.
49. Agreement for Right to Purchase
50. Guaranty of Weingarten Realty Investors

SETTLEMENT DOCUMENTS

51. Seller's Statement of Settlement
52. Purchaser's Statement of Settlement
53. Agreement for Taxes
54. Utility Agreement
55. FIRPTA Affidavit
56. Seller-Owner Final Affidavit and Agreement
57. Real Property Transfer Declaration
58. Closing Confirmation for 1099 Reporting
59. Commercial Closing Instructions
60. Information with Respect to Conveyance of a Colorado Real Estate Interest (DR 1083)
61. Seller's Instruction Letter of Instruction to Title Company
62. Isaacson, Rosenbaum Woods & Levy Letters of Instruction to Title Company (2)
63. Colorado Housing and Finance Authority Letter of Instruction to Title Company
64. Albertson's Letter of Instruction to Title Company

TITLE/SURVEY

65. Final Title Commitment - Town Center
66. Final Survey -- Town Center
67. Final Title Commitment – Allied site
68. Final Survey – Allied site

PURCHASER ENTITY AND LOAN DOCUMENTS

69. Amended Affidavit for Property Held in Trust or Joint Venture
70. Deed of Trust and Security Agreement
71. Absolute Assignment of Leases and Rents
72. UCC Financing Statement

OTHER

73. Attorney's Opinion Letter
74. HOA Estoppel Letter
75. Tap Fee Allocation documents
76. Insurance Certificates

RELEASE DOCUMENTS

77. Releases of Deeds of Trust from Colorado Housing and Finance Authority and Commercial Federal Savings Bank
78. Promissory Note (Tap Fees Financing) by Allied marked Paid
79. Partial Release of Rental and Occupancy Covenant
80. Amendment to Sublease Agreement (Allied) – reflects release of property from Allied sublease

This property is subject to an Environmental Covenant held by the Colorado Department of Public Health and Environment pursuant to section 25-15-321, C.R.S.

ENVIRONMENTAL COVENANT

The Lowry Economic Redevelopment Authority ("LERA") grants an Environmental Covenant ("Covenant") this 9th day of January, 2006 to the Hazardous Materials and Waste Management Division of the Colorado Department of Public Health and the Environment ("the Department") pursuant to § 25-15-321 of the Colorado Hazardous Waste Act, § 25-15-101, et seq. The Department's address is 4300 Cherry Creek Drive South, Denver, Colorado 80246-1530.

WHEREAS, the LERA is the owner of certain property commonly referred to as the Fire Training Zone at the former Lowry Air Force Base, located in the City and County of Denver and City of Aurora, more particularly described in Attachment A, attached hereto and incorporated herein by reference as though fully set forth (hereinafter referred to as "the Property"). The Property is part of the Mira Vista Golf Course; and

WHEREAS, pursuant to the First Amendment to the Consent Agreement Number 01-08-07-02, the Property is the subject of enforcement and remedial action pursuant to the Colorado Hazardous Waste Act, § 25-15-301, et. seq.; and

WHEREAS, the purpose of this Covenant is to ensure protection of human health and the environment by restricting access to, excavation within, and the further transfer of the Property;

WHEREAS, the LERA desires to subject the Property to certain covenants and restrictions as provided in Article 15 of Title 25, Colorado Revised Statutes, which covenants and restrictions shall burden the Property and bind all subsequent parties having any right, title or interest in the Property, or any part thereof, their heirs, successors and assigns, and any persons using the land, as described herein, for the benefit of the Department.

NOW, THEREFORE, the LERA hereby grants this Environmental Covenant to the Department, and declares that the Property as described in Attachment A shall hereinafter be bound by, held, sold, and conveyed subject to the following requirements set forth in paragraphs 1 through 10, below, which shall run with the Property in perpetuity and be binding on all subsequent parties having any right, title or interest in the Property, or any part thereof, their heirs, successors and assigns, and any persons using the land, as described herein. As used in this Environmental Covenant, the term OWNER means the record owner of the Property and, if any, any other person or entity otherwise legally

EXHIBIT 4

authorized to make decisions regarding the transfer of the Property or placement of encumbrances on the Property, other than by the exercise of eminent domain.

1) Use restrictions

The OWNER will not change the current use of the Property without the provision of notice to and the prior written approval of the Department.

The OWNER shall delineate the Property by use of appropriate fencing and signage, as approved by the Department, that will prohibit unauthorized entry.

The OWNER shall allow access to Lowry Assumption, LLC to complete the remediation of the Property.

The OWNER shall not directly interfere or take any actions that could indirectly interfere with remediation of the Property.

The OWNER shall not conduct or permit any others to conduct any subsurface excavating, digging, drilling, or other disturbance of the Property without the provision of notice to and the prior written approval of the Department.

The OWNER shall not deposit or permit any solid or hazardous waste in or upon the Property and shall immediately notify the Department if any solid or hazardous waste is deposited in or upon the Property.

The OWNER shall execute any environmental covenants required by the Department after completion of the remediation of the Property.

2) Modifications This Covenant runs with the land and is perpetual, unless modified or terminated pursuant to this paragraph. OWNER may request that the Department approve a modification or termination of the Covenant. The request shall contain information showing that the proposed modification or termination shall, if implemented, ensure protection of human health and the environment. The Department shall review any submitted information, and may request additional information. If the Department determines that the proposal to modify or terminate the Covenant will ensure protection of human health and the environment, it shall approve the proposal. No modification or termination of this Covenant shall be effective unless the Department has approved such modification or termination in writing. Information to support a request for modification or termination may include one or more of the following:

a) a proposal to perform additional remedial work;
b) new information regarding the risks posed by the residual contamination;
c) information demonstrating that residual contamination has diminished;

d) information demonstrating that the proposed modification would not adversely impact the remedy and is protective of human health and the environment; and
e) other appropriate supporting information.

3) Conveyances OWNER shall notify the Department at least fifteen (15) days in advance of any proposed grant, transfer or conveyance of any interest in any or all of the Property.

4) Notice to Lessees OWNER agrees to incorporate either in full or by reference the restrictions of this Covenant in any leases, licenses, or other instruments granting a right to use the Property.

5) Notification for proposed construction and land use Subject to the Use Restriction above, OWNER shall notify the Department simultaneously when submitting any application to a local government for a building permit or change in land use.

6) Inspections The Department shall have the right of entry to the Property at reasonable times with prior notice for the purpose of determining compliance with the terms of this Covenant. Nothing in this Covenant shall impair any other authority the Department may otherwise have to enter and inspect the Property.

7) No Liability The Department does not acquire any liability under State law by virtue of accepting this Covenant.

8) Enforcement The Department may enforce the terms of this Covenant pursuant to §25-15-322, C.R.S. The OWNER may file suit in district court to enjoin actual or threatened violations of this Covenant.

9) Owner's Compliance Certification OWNER shall submit an annual Report to the Department, on the anniversary of the date this Covenant was signed by the OWNER, detailing OWNER's compliance, and any lack of compliance, with the terms of this Covenant.

10) Notices Any document or communication required under this Covenant shall be sent or directed to:

Federal Facilities Remediation and Restoration Unit
Hazardous Materials and Waste Management Division
Colorado Department of Public Health and the Environment
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

LERA, has caused this instrument to be executed this 9th day of January, 2006.

LOWRY ECONOMIC REDEVELOPMENT AUTHORITY

By: Thomas O Mark

Title: EXECUTIVE DIRECTOR

STATE OF COLORADO)
) ss:
CITY AND COUNTY OF DENVER)

The foregoing instrument was acknowledged before me this 9th day of January, 2006 by Thomas O. Markham as Executive Director of behalf of Lowry Economic Redevelopment Authority

LINDA R. DYMOND
NOTARY PUBLIC
STATE OF COLORADO
My Commission Expires 09/18/2006

Linda R. Dymond
Notary Public

555 Zuni Way
Address
Denver, CO 80230

My commission expires: 9-18-2006

Accepted by the Colorado Department of Public Health and Environment this 18th day of January, 2006.

By Gary W. Baughman

Title: Division Director, HMWMD

STATE OF Colorado)
) ss:
COUNTY OF Arapahoe)

The foregoing instrument was acknowledged before me this 18th day of January 2006 by Craig W. Bingham on behalf of the Colorado Department of Public Health and Environment.

Notary Public

4366 Cherry Creek Road

Address

Aurora Co 80246

My commission expires: 2-29-08

The undersigned hereby consents to the foregoing Environmental Covenant.

CGA-CGWA GOLF, LLC
a Colorado limited liability company

By: _____

Title: _____

Date: _____

STATE OF _____)
) ss:
COUNTY OF _____)

STATE OF _____)
) ss:
COUNTY OF _____)

The foregoing instrument was acknowledged before me this ___ day of _____, _____ by _____ on behalf of the Colorado Department of Public Health and Environment.

_____
Notary Public

_____
Address

_____

My commission expires: _____

The undersigned hereby consents to the foregoing Environmental Covenant.

CGA-CGWA GOLF, LLC
a Colorado limited liability company

By: Jerome M. Hauer

Title: Manager

Date: 1/10/06

STATE OF COLORADO)
) ss:
COUNTY OF DENVER)

NOTARY PUBLIC STATE OF COLORADO

The foregoing instrument was acknowledged before me this 10TH day of JANUARY, 2006 by JEROME M. KRAUSE, as MANAGER of CGA-CGWA GOLF, LLC, a Colorado limited liability company.

Notary Public

4582 S. USSTER ST. #1050
Address

DENVER CO 80237

My commission expires: 7/31/08

ATTACHMENT A

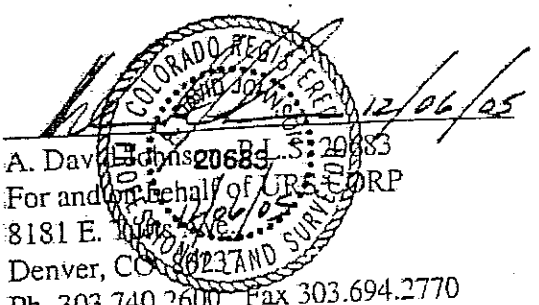
DESCRIPTION
Excavation Area 1

A parcel of land located in the Southeast Quarter of Section 10, Township 4 South, Range 67 West of the Sixth Principal Meridian, City and County of Denver, State of Colorado, more particularly described as follows:

COMMENCING at the South Quarter corner of said Section 10;
thence North 14°24'03" East a distance of 2428.90 feet to the **POINT OF BEGINNING**;
thence North 00°00'00" East a distance of 50.00 feet;
thence South 90°00'00" East a distance of 50.00 feet;
thence South 00°00'00" West a distance of 50.00 feet;
thence North 90°00'00" West a distance of 50.00 feet to the **POINT OF BEGINNING**.

Containing 2,500 sq. ft. or 0.057 acres, more or less.

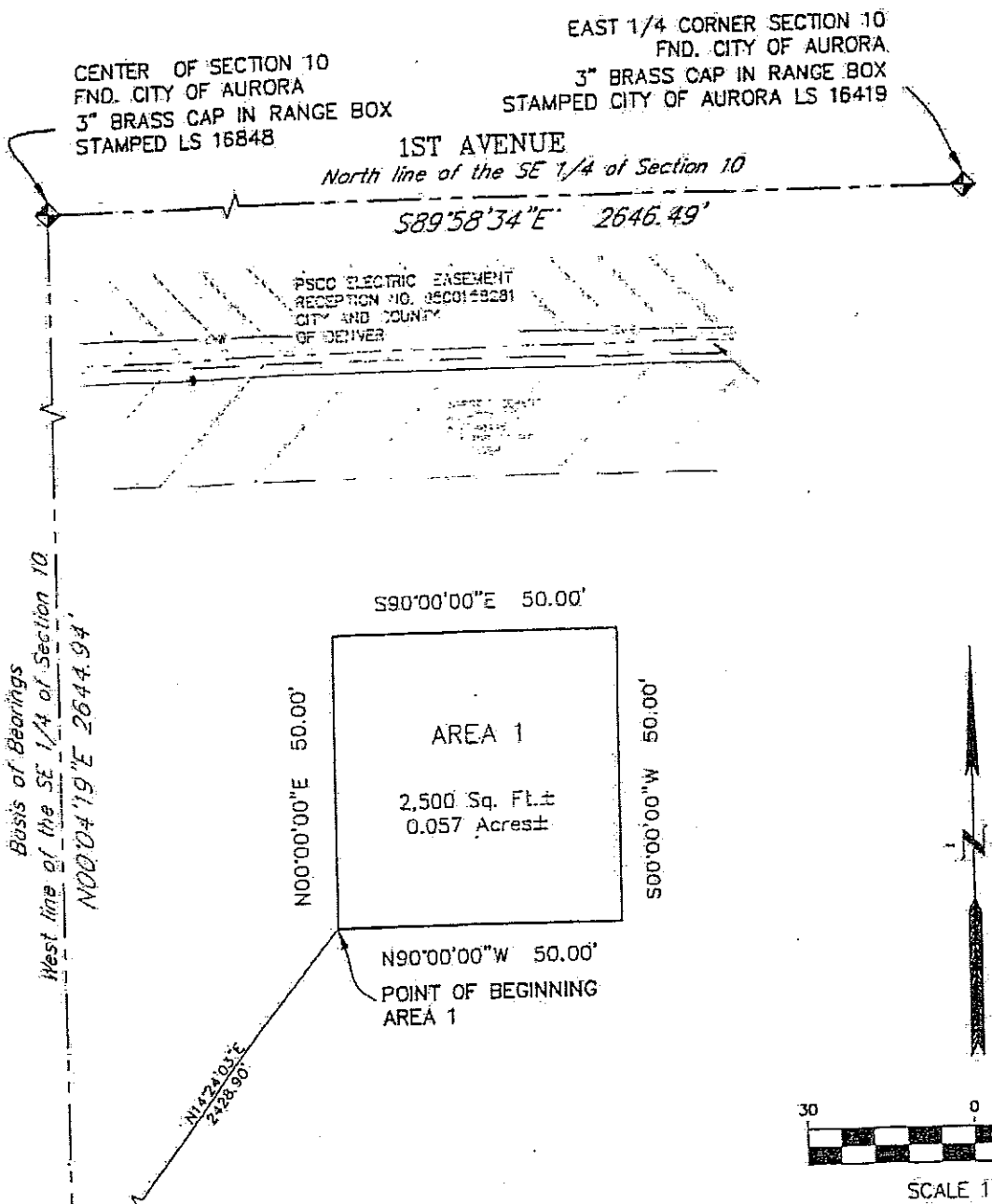
BASIS OF BEARINGS: Bearings are based on the west line of the Southeast Quarter of Section 10, Township 4 South, Range 67 West of the 6th Principal Meridian as being North 00°04'19" East. The bearing of said west line is shown on the City and County of Denver Lowry Air Force Base Boundary Survey under Project No. 94-576, dated 4/09/96 and filed in Book 23 of the County Surveyor's Land Survey/Right of Way Surveys at Pages 102-103. The Center section corner is a found 3" brass cap in a City of Aurora range box, stamped PLS 16848 and the South quarter corner of Section 10 is a found 3-1/4" aluminum cap, stamped URS CORP PLS 20683.



12/06/05

A. David Johns, P.L.S. 20683
For and on behalf of URS CORP
8181 E. Tufts Ave.
Denver, CO 80237
Ph. 303.740.2600 Fax 303.694.2770
K:\LEGALS\Lowry\GOLFCOURSE\PARECEL DESC excavation area1.doc
12/6/2005 11:28 AM

EXHIBIT



COLORADO REGISTERED
J. DAVID LOWDEN
20683
PROFESSIONAL LAND SURVEYOR

This exhibit does not represent a monumented survey. It is intended only to depict the attached description.

URS

8158 E. 5TH AVENUE
SUITE 200
DENVER, CO 80230
Ph: 303-592-2829
Fax: 720-859-0373

8181 E. TUFTS AVENUE
DENVER, CO 80237
Ph: 303-740-2600
Fax: 303-694-3946

EXHIBIT ACCOMPANYING DESCRIPTION

EXHIBIT

EXCAVATION AREA 1

DENVER COLORADO

Projects\Lowry ...ueeded Areas\Lowry Path excavation-LRA.dwg 12/6/2005 11:27:37 AM, b

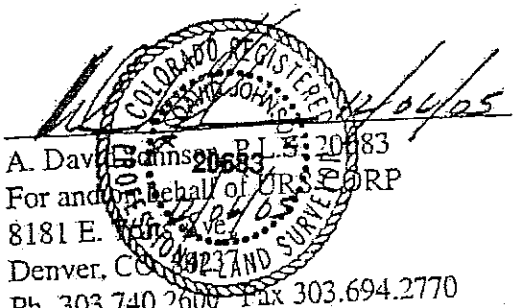
DESCRIPTION
Excavation Area 2

A parcel of land located in the Southeast Quarter of Section 10, Township 4 South, Range 67 West of the Sixth Principal Meridian, City and County of Denver, State of Colorado, more particularly described as follows:

COMMENCING at the South Quarter corner of said Section 10;
thence North 17°43'55" East a distance of 2469.05 feet to the **POINT OF BEGINNING**;
thence South 90°00'00" West a distance of 24.83 feet to a point of curvature;
thence 78.80 feet along the arc of a curve to the right having a central angle of 180°00'00", a radius of 25.08 feet and whose chord bears North 00°00'00" East a distance of 50.16 feet to a point of tangency;
thence South 90°00'00" East a distance of 24.83 feet to a point of curvature;
thence 78.80 feet along the arc of a curve to the right having a central angle of 180°00'00", a radius of 25.08 feet and whose chord bears South 00°00'00" East a distance of 50.16 feet to a point of tangency and the **POINT OF BEGINNING.**

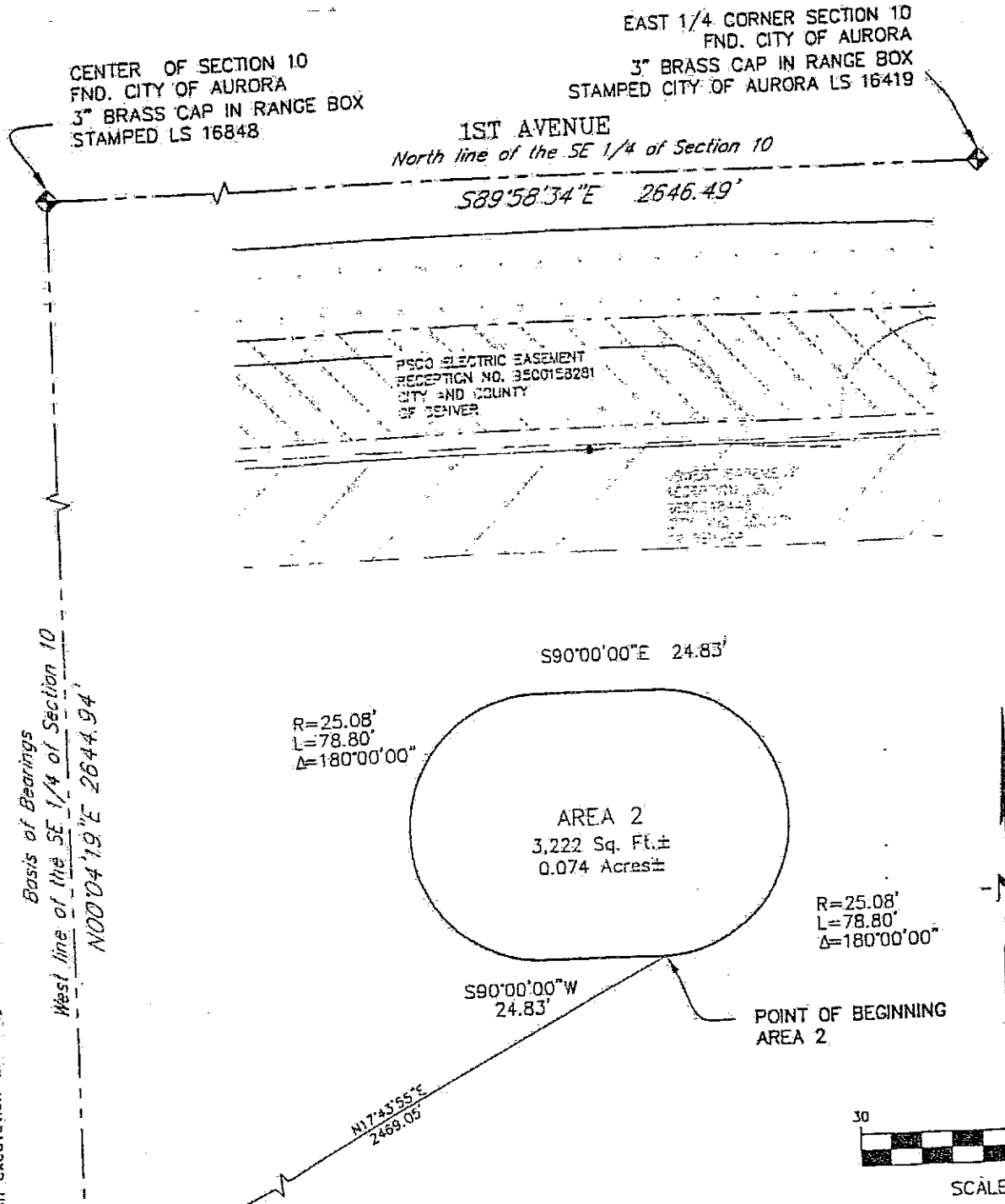
Containing 3,222 sq. ft. or 0.074 acres, more or less.

BASIS OF BEARINGS: Bearings are based on the west line of the Southeast Quarter of Section 10, Township 4 South, Range 67 West of the 6th Principal Meridian as being North 00°04'19" East. The bearing of said west line is shown on the City and County of Denver Lowry Air Force Base Boundary Survey under Project No. 94-576, dated 4/09/96 and filed in Book 23 of the County Surveyor's Land Survey/Right of Way Surveys at Pages 102-103. The Center section corner is a found 3" brass cap in a City of Aurora range box, stamped PLS 16848 and the South quarter corner of Section 10 is a found 3-1/4" aluminum cap, stamped URS CORP PLS 20683.



A. David Johnson, P.L.S. 20683
For and on behalf of URS CORP
8181 E. Tufts Ave.
Denver, CO 80237
Ph. 303.740.2600 Fax 303.694.2770
K:\LEGALS\Lowry\GOLFCOURSE\PARECEL DESC excavation area2.doc
12/6/2005 11:33 AM

EXHIBIT



COLORADO REGISTERED
DAVID L. JOHNSON
20683
PROFESSIONAL LAND SURVEYOR

URS

8158 E. 5TH AVENUE
SUITE 200
DENVER, CO 80230
Ph: 303-592-2829
Fax: 720-859-0373

8181 E. TUFTS AVENUE
DENVER, CO 80237
Ph: 303-740-2600
Fax: 303-694-3946

EXHIBIT ACCOMPANYING DESCRIPTION

EXHIBIT

EXCAVATION AREA 2

DENVER COLORADO

This exhibit does not represent a monumented survey. It is intended only to depict the attached description.

Projects\Lowry ...ded Areas\Lowry Path excavation-LRA.dwg 12/6/2005 11:27:37 AM

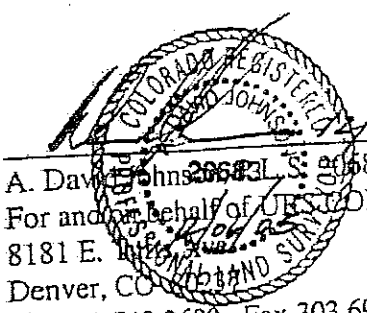
DESCRIPTION
Excavation Area 3

A parcel of land located in the Southeast Quarter of Section 10, Township 4 South, Range 67 West of the Sixth Principal Meridian, City and County of Denver and County of Arapahoe, State of Colorado, more particularly described as follows:

COMMENCING at the South Quarter corner of said Section 10;
thence North 34°27'57" East a distance of 2300.73 feet to the **POINT OF BEGINNING;**
thence North 00°00'00" East a distance of 50.00 feet;
thence South 90°00'00" East a distance of 50.00 feet;
thence South 00°00'00" West a distance of 50.00 feet;
thence North 90°00'00" West a distance of 50.00 feet and the **POINT OF BEGINNING.**

Containing 2,500 sq. ft. or 0.057 acres, more or less.

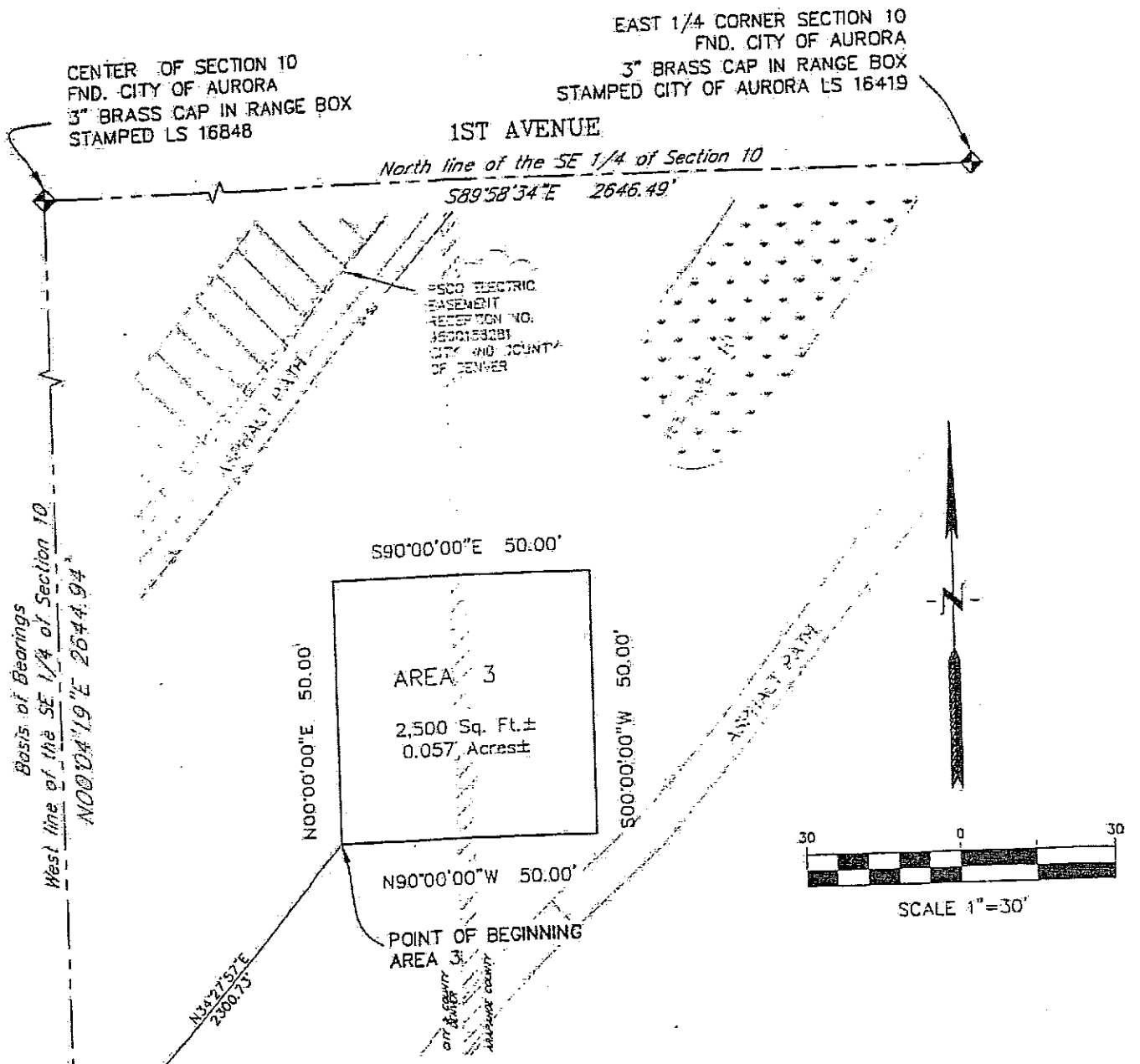
BASIS OF BEARINGS: Bearings are based on the west line of the Southeast Quarter of Section 10, Township 4 South, Range 67 West of the 6th Principal Meridian as being North 00°04'19" East. The bearing of said west line is shown on the City and County of Denver Lowry Air Force Base Boundary Survey under Project No. 94-576, dated 4/09/96 and filed in Book 23 of the County Surveyor's Land Survey/Right of Way Surveys at Pages 102-103. The Center section corner is a found 3" brass cap in a City of Aurora range box, stamped PLS 16848 and the South quarter corner of Section 10 is a found 3-1/4" aluminum cap, stamped URS CORP PLS 20683.



12/06/05

A. David Johns, P.L.S. 20683
For and on behalf of URS CORP
8181 E. Tufts Ave.
Denver, CO 80237
Ph. 303.740.2600 Fax 303.694.2770
K:\LEGALS\Lowry\GOLFCOURSE\PARECEL DESC excavation area3.doc
12/6/2005 11:34 AM

EXHIBIT



COLORADO REGISTERED
A. DAVID JOHNSON
20683
PROFESSIONAL LAND SURVEYOR

This exhibit does not represent a monumented survey. It is intended only to depict the attached description.

URS

8158 E. 5TH AVENUE
SUITE 200
DENVER, CO 80230
Ph: 303-592-2829
Fax: 720-859-0373

8181 E. TUFTS AVENUE
DENVER, CO 80237
Ph: 303-740-2600
Fax: 303-694-3946

EXHIBIT ACCOMPANYING DESCRIPTION

EXHIBIT

EXCAVATION AREA 3

DENVER COLORADO

Projects\Lowry\...eded Areas\Lowry Pwh excavation-LRA.dwg 12/6/2005 11:27:37 AM

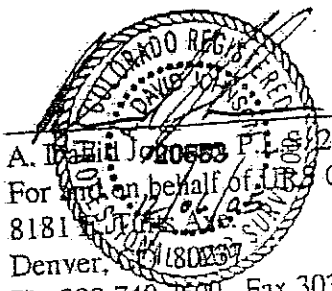
DESCRIPTION
Excavation Area 4

A parcel of land located in the Southeast Quarter of Section 10, Township 4 South, Range 67 West of the Sixth Principal Meridian, County of Arapahoe, State of Colorado, more particularly described as follows:

COMMENCING at the South Quarter corner of said Section 10;
thence North 43°32'12" East a distance of 2616.11 feet to the **POINT OF BEGINNING**;
thence North 00°00'00" East a distance of 50.00 feet;
thence South 90°00'00" East a distance of 50.00 feet;
thence South 00°00'00" West a distance of 50.00 feet;
thence North 90°00'00" West a distance of 50.00 feet to the **POINT OF BEGINNING**.

Containing 2,500 sq. ft. or 0.057 acres, more or less.

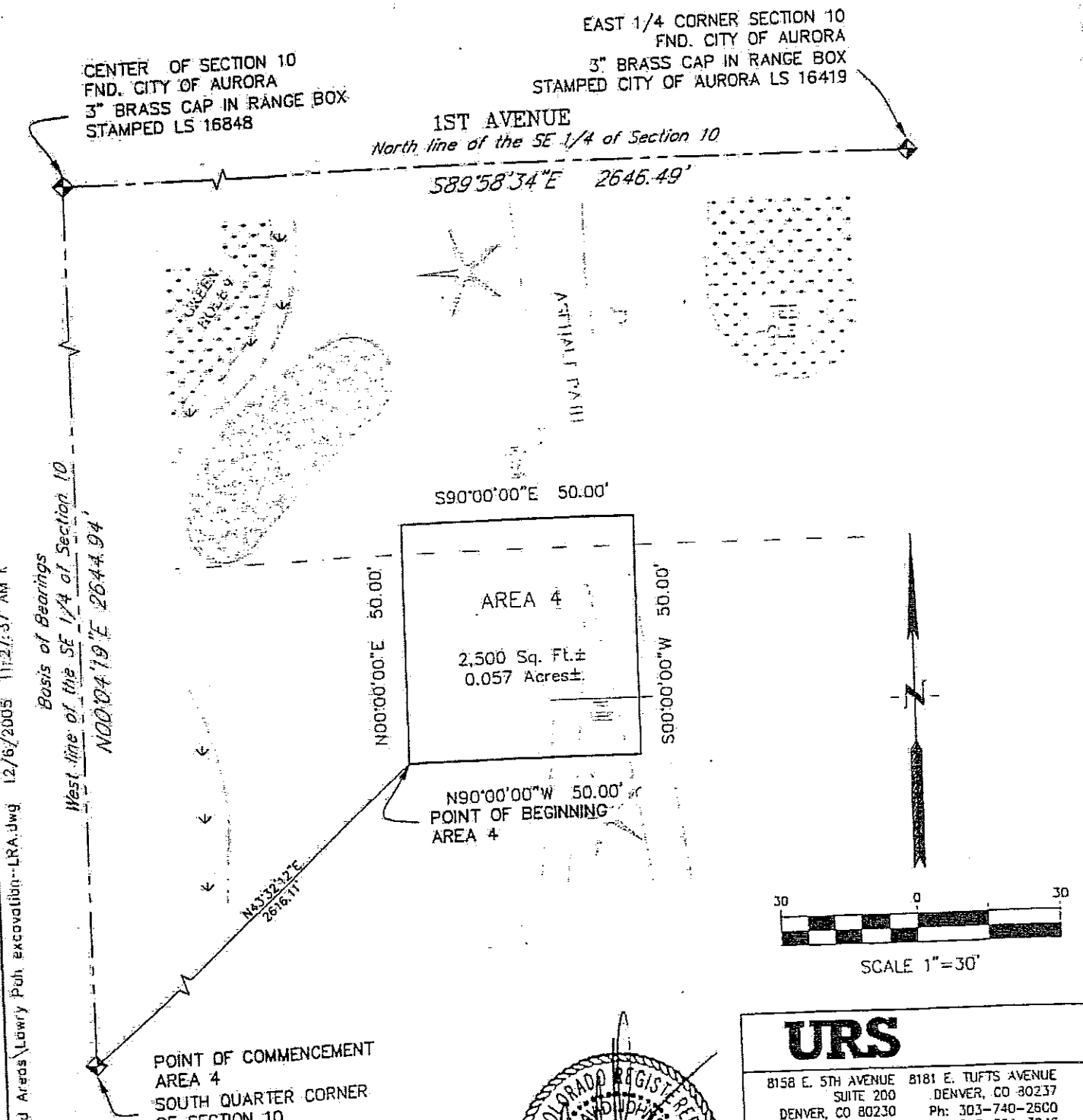
BASIS OF BEARINGS: Bearings are based on the west line of the Southeast Quarter of Section 10, Township 4 South, Range 67 West of the 6th Principal Meridian as being North 00°04'19" East. The bearing of said west line is shown on the City and County of Denver Lowry Air Force Base Boundary Survey under Project No. 94-576, dated 4/09/96 and filed in Book 23 of the County Surveyor's Land Survey/Right of Way Surveys at Pages 102-103. The Center section corner is a found 3" brass cap in a City of Aurora range box, stamped PLS 16848 and the South quarter corner of Section 10 is a found 3-1/4" aluminum cap, stamped URS CORP PLS 20683.



12/06/05

A. David J[illegible] P.L.S. 20683
For and on behalf of URS CORP
8181 E. Tufts Ave.
Denver, CO 80237
Ph. 303.740.2600 Fax 303.694.2770
K:\LEGALS\Lowry\GOLFCOURSE\PARECEL DESC excavation area4.doc
12/6/2005 11:57 AM

EXHIBIT



This exhibit does not represent a monumented survey. It is intended only to depict the attached description.

URS

8158 E. 5TH AVENUE
SUITE 200
DENVER, CO 80230
Ph: 303-592-2829
Fax: 720-859-0373

8181 E. TUFTS AVENUE
DENVER, CO 80237
Ph: 303-740-2600
Fax: 303-694-3946

EXHIBIT ACCOMPANYING DESCRIPTION

EXHIBIT

EXCAVATION AREA 4

DENVER COLORADO

FREMONT ENVIRONMENTAL INC.

October 24, 2005

Ms. Elizabeth Sopher
Lowry Assumption, LLC
555 Uinta Way
Denver, CO 80230-6917

Subject: **Health and Safety Plan**
Lowry Assumption LLC
Fremont Project No. C005-007

Dear Elizabeth:

Enclosed is the Health and Safety Plan for the Lowry Site. This plan was developed to identify potential site hazards and establish controls for tasks involving hazardous substances on the Lowry Redevelopment site. The plan is required by the Occupational Safety and Health Administration under the Hazardous Waste Operations and Emergency Response Standard, 29 CFR 1910.120. It applies to field tasks on the Lowry site.

Fremont Environmental appreciates the opportunity to provide this service. Please contact me at (720) 351-8984 if you have any questions regarding this plan.

Sincerely,

FREMONT ENVIRONMENTAL INC.

Joan Henehan, P.E., C.I.H., C.S.P.
Senior Engineer

Enclosure

1530 BOISE AVENUE, SUITE 205, LOVELAND, CO 80538
(970) 663-2301 (DIRECT), (970) 663-2300 (FAX)

EXHIBIT 5

DRAFT SITE HEALTH AND SAFETY PLAN

LOWRY ASSUMPTION, LLC

LOWRY REDEVELOPMENT

FREMONT PROJECT NO. C005-007

Prepared by:

Fremont Environmental Inc.
1530 Boise Avenue, Suite 205
Loveland, Colorado 80538
(970) 663-2301

October 24, 2005

Table of Contents

TABLES

FIGURES

SITE HEALTH AND SAFETY PLAN
LOWRY ASSUMPTIONS, LLC
LOWRY REDEVELOPMENT
FREMONT PROJECT NO. C005-007

1.0 INTRODUCTION

This site-specific health and safety plan (HASP) was developed to provide safety guidelines and control measures for employees of International Risk Group, LLC (IRG) and its affiliates and subsidiaries working on behalf of the Lowry Assumption, LLC (LAC) during the implementation of the remediation activities defined in the Consent Agreement between the Colorado Department of Public Health and Environment (CDPHE) and the LAC at the former Lowry Air Force Base (LAFB). It applies to IRG employees directly involved in coordinating and managing field activities on the LAFB. This HASP was prepared in accordance with applicable Occupational Safety and Health Administration (OSHA) standards and specifically addresses the requirements of 29 Code of Federal Regulations (CFR) 1910.120, Hazardous Waste Operations and Emergency Response.

1.1 Application

Information regarding environmental conditions of the property was developed under the Air Force Installation Restoration Program (IRP) and conducted pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), the Defense Environmental Restoration Program (DERP) and other applicable Federal and state regulations. Specific clean-up operations are corrective actions covered by the Resource Conservation and Recovery Act of 1976 (RCRA) issued by the Colorado Department of Public Health and Environment (CDPHE) as consent orders. The OSHA 1910.120 standard applies to clean-up operations conducted under these standards.

Extensive site characterization and cleanup has been completed since the AFB closed in 1994. Environmental cleanup of the groundwater and closure of the landfill were privatized in August 2002; cleanup of the remaining soil issues were privatized in 2005. These activities are managed by the Lowry Redevelopment Authority (LRA) and its contractor, LAC. LAC is responsible for the property restoration and identification of additional environmental conditions during the course of development activities, pursuant to the Consent Agreement effective December 22, 2006.

1.2 Purpose

The purpose of this HASP is to describe chemical and radiological hazards historically present on the site and to provide control measures and procedures for protecting IRG field personnel assigned to the LRA project. This plan has been developed for IRG employees working on the LAFB only. IRG employees are responsible for coordinating and managing field activities associated with the redevelopment of the former base property for residential and commercial use.

Specific remediation and redevelopment tasks are subcontracted as redevelopment progresses to firms with applicable expertise. The majority of contracts associated with the redevelopment efforts are construction-related. This plan does not apply to these tasks or to subcontractor

employees. Subcontractors are required to develop and comply with their own HASP that protects their employees from site hazards.

IRG field activities associated with this site include general oversight of subcontractor tasks. Generally, this involves ensuring that subcontractors are complying with the specifications of their contract. In addition, IRG field personnel will assess unanticipated environmental hazards if encountered by subcontractors. They may also characterize unanticipated hazards through sampling when it is safe to do so. Unique hazards, such as unexploded ordnance (UXO), will be sampled and abated only by qualified contractors.

This plan specifically addresses:

- Potential hazards that may be encountered during redevelopment tasks,
- Responsibilities of key project personnel for the health and safety of employees and the public from potential site hazards and for identifying and minimizing risks from hazards through communication and the implementation of appropriate controls,
- Training for site employees including the specific requirements of this HASP and other necessary programs to ensure that they can appropriately anticipate, identify and control exposures to site hazards,
- Exposure monitoring requirements for assessing site hazards and protecting site personnel and the public,
- Area monitoring requirements for ensuring that site hazards do not migrate from designated work zones,
- Emergency response procedures for anticipated or unexpected hazards or hazardous situations, and
- Safety guidelines needed to protect site personnel, visitors, and the public from physical and environmental hazards associated with redevelopment tasks.

2.0 SITE DESCRIPTION

LAFB is located approximately five miles southeast of downtown Denver. It covers approximately 1,866 acres and is generally located between Quebec Street to the west, Eleventh Avenue to the north, Dayton Street and Havana Street to the east and Alameda Avenue to the south. More than half of the property is located in the city of Denver (Denver County) and the remainder in the city of Aurora (Arapahoe County). A site map is provided as Figure 1.

2.1 Site History

LAFB was established as a technical training facility for the Army Air Corps Technical School in 1937. It was scheduled for permanent closure under the Base Realignment and Closure (BRAC) Act of 1988 and the Defense Base Realignment and Closure Act of 1990. It was formally closed on September 30, 1994. Tasks and facilities associated with the former base included:

- aircraft storage and maintenance,
- waste disposal (landfill areas, hazardous waste storage, and a fly ash disposal area),
- vehicle maintenance and storage,
- medical and dental clinics,

- aircraft and vehicle fueling,
- coal storage areas,
- housing,
- classroom facilities,
- administration buildings,
- recreation areas (swimming pools, ball fields, and golf course), and
- warehouse facilities.

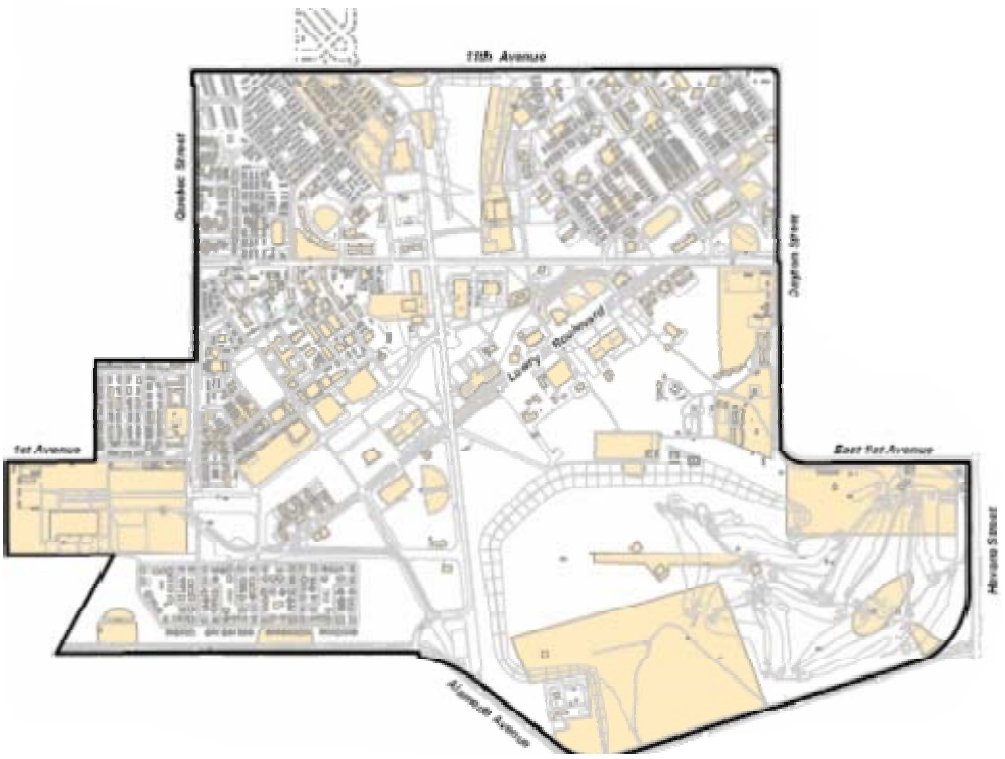


Figure 1: Lowry Site Map (from Final Executive Summary, January 2005, RCRA Facility Assessment Report)

Chemicals were utilized for many of these activities in accordance with standard practices at the time. Chemical substances were also used as part of training programs. Training programs, which in some cases used dummy chemicals, involved the following:

- armament,
- chemical warfare,
- fire fighting,
- flight and avionics,
- missiles,

- ordnance,
- photography, and
- Precision Measurement Equipment Laboratory (PMEL).

Current response actions include the Fire Training Zone soil remediation, the Outdoor Firing Range soil and lead remediation, asbestos soil removal at Building 670, closure of the 75-acre base landfill located at the south-central portion of the base, groundwater remediation and monitoring at Building 606, mercury remediation at Building 898, abandonment of former water supply wells at Buildings 950 and 1435, investigations of two septic tanks/leach fields, and asbestos in soils investigation and cleanup in the Northwest Neighborhood (Final RFA Report, January 2005).

3.0 ORGANIZATION AND RESPONSIBILITIES

LAC is committed to providing a safe work environment for IRG and its employees. All site personnel are responsible for understanding the safety requirements established for this site and discussed in this plan. Key site personnel are identified in Figure 2.

3.1 Program Manager

The Lowry Program Manager is ultimately responsible for the safety of site employees and for protecting the public and the environment from hazards associated with project tasks. The Program Manager is also responsible for ensuring that adequate resources are available for necessary safety controls. The Program Manager will ensure that subcontractors comply with the specified requirements of their contracts and that IRG tasks are conducted in accordance with established procedures in this HASP and other applicable sound safety practices.

3.2 Project Manager

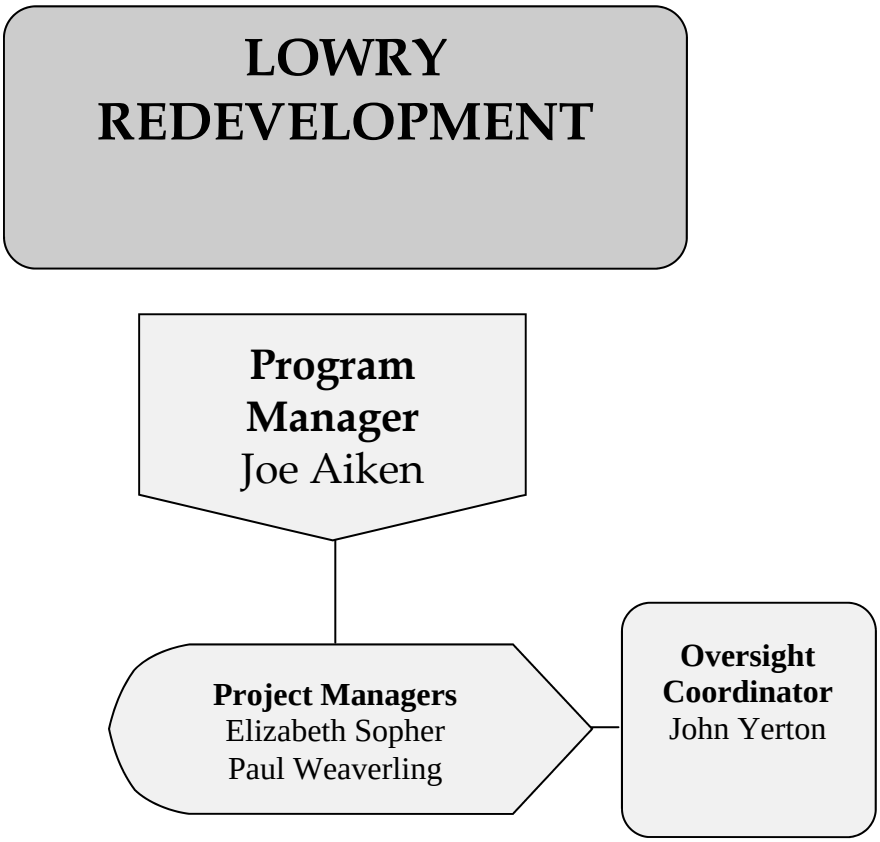
The Project Manager (PM) is responsible for approving this site-specific HASP and any revisions or addendums to the plan. The PM is also responsible for implementing the HASP and ensuring that adequate resources are available as needed for controls specified in the HASP.

3.3 Oversight Coordinator

The Oversight Coordinator or designate will be on site for invasive ground activities in designated areas of the site where the potential for exposure to contaminated soil, ground water or debris exists. The Oversight Coordinator will ensure that subcontractors perform work in accordance with safe work procedures, that airborne contaminants are controlled, and that the surrounding population and environment are protected.

3.4 Visitors

All visitors will be escorted by an IRG employee or designate in controlled areas during tasks where the possibility of exposure to hazardous substances exists. Prior to accessing these areas, visitors will be informed of the hazards that may exist and read the relevant portion of the HASP. Following the safety briefing, they will sign the appropriate form (see Appendix A) acknowledging that they are aware of the hazards and will follow safety procedures for the controlled location.



4.0 HAZARD ASSESSMENT

Due to the historical use of Lowry property as a former Air Force Base, chemical and radiological hazards have been investigated on the site. Significant characterization data is available from both historical records and samples (i.e., soil, groundwater, surface water and air) obtained during site investigation and cleanup efforts. Characterization data provides information on both the location of potential contaminants and anticipated concentrations.

The following specific hazards potentially exist and may be encountered on the site as the redevelopment continues.

- Petroleum
- Chlorinated solvents
- Oil/grease
- Coal
- Fly ash
- PCBs
- Friable and non-friable asbestos
- Lead
- Metals
- PAHs
- Pesticides

- Mercury

During the investigations, most of these contaminants have been identified in the soil or ground water in isolated areas and response actions have been performed or are planned where necessary. Contaminants were typically present in the soil and ground water in the parts per million (ppm) range. Sludge has been identified in septic tanks and oil/water separators. Similar concentrations have been identified in sludge samples. Many substances in the above list are not volatile; they present a more significant hazard as an airborne dust than as a vapor. Suppression of airborne dust will significantly minimize or prevent exposure to many site contaminants if they are identified in the future.

The ground water elevation varies across the site from approximately 8 to 60 feet below the ground surface. Contact with ground water is not anticipated during most excavation or trenching tasks. However, contaminated ground water may be encountered in the Lowry East section due to the shallow ground water elevation in this area. Adequate controls, including air engineering controls, monitoring and the use of PPE, will be utilized for utility or trenching operations reaching depths at or near the ground water level in areas overlying contaminated ground water where appropriate.

This section discusses hazards associated with contaminants historically identified on this site. Toxicological risks vary and health affects depend on the degree and extent of exposure.

4.1 Petroleum - Hazards and Controls

Health effects associated with exposure to petroleum vary and depend upon the route of exposure, formulation of the material, and the level and duration of exposure. Potential routes of exposure associated with Lowry site tasks include skin contact and inhalation of volatilized petroleum constituents. Ingestion of contaminated material is less likely but can occur through poor industrial hygiene practices such as smoking or eating with soiled hands.

Acute health effects associated with petroleum exposure include irritation of the eye, skin, and mucous membrane. Health effects become more pronounced with increasing concentrations and can include nausea, headache, fatigue, and dizziness; unconsciousness can occur at very high concentrations. Dermatitis is associated with repeated exposure of the skin to petroleum. Organs affected by gasoline exposure include the eyes, skin, respiratory system, central nervous system (CNS), liver, kidneys. Benzene, a common constituent of gasoline, is a known human carcinogen associated with leukemia.

Volatilized petroleum presents a serious fire hazard. The explosive limits are about 1.4% and 7.6% (formulations vary) and the flash point is about -50°F. The vapor density of petroleum is three to four times heavier than air further increasing the exposure and fire risk in enclosed areas. It is also not miscible with water (low ppm range) and is less dense allowing it to separate and collect on water surfaces.

Petroleum may be encountered in soil, ground water or in closed containers such as drums or underground storage tanks. The potential for vapor inhalation exists in all circumstances. Exposure to petroleum vapors from contaminated soil at concentrations anticipated on the

Lowry site can usually be controlled by standing or working up wind. The odor threshold of gasoline is about 0.3 ppm, well below published exposure limits (see Table 1), allowing it to be readily detected at low concentrations.

TABLE 1: PETROLEUM EXPOSURE LIMITS

Substance	OSHA PEL/ACGIH TLVs				
	8-Hour Time Weighted Average	Short-Term Exposure Limit	Acceptable Ceiling Concentration	Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift	
				Concentration	Maximum Duration
Benzene	1 ppm/0.5 ppm	5 ppm/2.5 ppm	-	-	-
Ethylbenzene	100 ppm/100 ppm	none/125 ppm	-	-	-
Gasoline	none[1]/300 ppm	none[1]/500 ppm	-	-	-
MTBE	none/50 ppm	none	-	-	-
Naphthalene	10 ppm/10 ppm	none/15 ppm	-	-	-
Toluene	200 ppm/50 ppm	none	300 ppm	500 ppm	10 minutes
Total inorganic lead	50 µg/m^3/50 µg/m^3	none	-	-	-
Xylene	100 ppm/100 ppm	none/150 ppm	-	-	-

[1]OSHA no longer publishes a Permissible Exposure Limit (PEL) for gasoline and/or petroleum distillates. Their current policy states that "the composition of these materials varies greatly and thus a single Threshold Limit Value (TLV) for all types of these materials is no longer applicable. The content of benzene, other aromatics and additives should be determined to arrive at the appropriate TLV."

Exposure to petroleum constituents will be controlled through the use of personal protective equipment (PPE), air monitoring and administrative controls. Site tasks with the highest potential for petroleum exposure include sampling of tanks or other bulk containers or entry into excavations with petroleum-contaminated soil. Neither of these tasks is anticipated but may occur as redevelopment progresses. Controls will be utilized to ensure that exposure levels are maintained below published exposure levels.

PPE is required for tasks where petroleum product or contaminated media such as soil or groundwater may be encountered. The use of respirators is not anticipated but may be warranted in enclosed spaces or when sampling concentrated product in bulk containers. A Job Safety Analysis will be developed for any task warranting the use of a respirator. Nitrile or Viton gloves will be utilized when handling petroleum contaminated media.

Monitoring will be conducted during tasks which may result in exposure to petroleum vapors. See Section 8.0 for air monitoring actions levels.

4.2 Chlorinated Solvents - Hazards and Controls

Several chlorinated hydrocarbons have been identified in soil and groundwater on the site including perchloroethylene (PCE), trichloroethylene (TCE), and 1,2-dichloroethane (DCA). The likely routes of exposure to chlorinated solvents include inhalation, ingestion and direct contact with the skin or eye.

The toxicity of chlorinated solvents varies; many affect the CNS and some are identified as carcinogens. PCE can affect the CNS and cause irritation of the skin, eyes, and upper respiratory tract. TCE can depress the CNS, affect kidneys, liver, and lungs and can cause rapid and irregular heartbeat. Toxic effects are increased when combined with alcohol, caffeine, and other drugs. DCA can cause CNS depression and damage to the liver, kidneys, heart, and digestive system. Eye contact with DCA can cause irritation and serious injury if not removed promptly.

DCA and TCE are flammable liquids; the LEL of both solvents are approximately 6% and their flash points are less than 100°F. PCE is not considered flammable. These chlorinated solvents are only slightly soluble in water.

Exposure levels will be maintained below OSHA PELs as shown in Table 3. Colorimetric tubes will be used in situations where chlorinated solvents may be encountered. A standard photoionization detector (PID) equipped with a 10.6 eV lamp will not ionize several of these chlorinated solvents and, thus, cannot be used for detecting their presence. A PID equipped with an 11.7 eV lamp is required to detect these contaminants. Air monitoring action levels are included in Section 8.0.

TABLE 2: CHLORINATED SOLVENT EXPOSURE LIMITS

Substance	OSHA PEL (ppm)			
	8-hour time weighted average	Acceptable ceiling concentration	Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift	
			Concentration	Maximum duration
1,2-DCA	50	100	200	5 min in any 3 hrs
TCE	100	200	300	5 min in any 3 hrs
PCE	100	200	300	5 min in any 2 hrs

Viton gloves will be used when sampling or handling media contaminated with chlorinated solvents. The use of air purifying respirators is not recommended for some chlorinated solvents since the odor threshold is not an adequate warning property for cartridge saturation.

4.3 Coal Dust - Hazards and Controls

Chronic inhalation of coal dust can directly affect lung function. Exposure to airborne levels of coal dust at or above the OSHA PEL (2 mg/m^3) is not anticipated on the Lowry site. Basic controls will be implemented when working at or in the vicinity of the former coal storage yard to ensure that the airborne dust is controlled through suppression measures. Nitrile or latex gloves will be worn for sampling tasks.

4.4 Fly Ash - Hazards and Controls

The fly ash present on the site has been characterized through analysis; hazardous constituents detected in the fly ash include coal tar pitch volatiles, pesticides, boron and selenium. Specific coal tar pitch volatiles include anthracene, chrysene, fluorene and phenanthrene. Exposure to anthracene, chrysene and phenanthrene is regulated by OSHA at 0.2 mg/m^3. Exposure to coal tar pitch volatiles can irritate the skin. Target organs include the kidney, lung and skin. Coal tar pitch volatiles are also considered a potential carcinogen. Potential exposure levels associated with concentrations detected in the fly ash are not anticipated to reach or exceed OSHA PELs.

Pesticides detected in the fly ash include aldrin, delta-BHC (lindane), heptachlor and methoxychlor. The primary acute toxic action of organochlorine pesticides is on the nervous system. They can be absorbed through the skin. Pesticide-contaminated dust particles trapped in respiratory mucous, when swallowed, can be absorbed in the gastrointestinal tract.

Selenium is a trace mineral; it is needed in small amounts for good health. However, exposure to higher concentrations can result in neurological effects. Short-term oral exposure to high concentrations of selenium may cause nausea, vomiting, and diarrhea. Chronic oral exposure to high concentrations can cause hair loss, nail brittleness, and neurological abnormalities.

Boron is a trace mineral. It is not considered toxic except at high concentrations.

The following table includes the OSHA PELs for individual constituents detected in the fly ash.

TABLE 3: FLY ASH CONSTITUENT EXPOSURE LIMITS

Constituent	OSHA PEL/ACGIH TLV (mg/m^3)
Anthracene	0.2/0.2
Chrysene	0.2/0.2
Fluorene	none
Phenanthrene	0.2/0.2
Aldrin	0.25 (skin)/0.25 (skin)
delta-BHC	0.5 (skin)/ 0.5 (skin)
Heptachlor	0.5 (skin)/0.5 (skin)
Methoxychlor	15 (total dust)/10
Boron (oxide)	15 (total dust)/10
Selenium	0.2/0.2

Exposure to constituents in the fly ash will be controlled through dust suppression measures. Table 4 identifies the maximum concentrations of individual constituents detected on the Lowry site and the airborne concentration of soil needed to reach the OSHA PEL. The airborne dust levels identified in Table 4 are significant and would impair visibility at a close range.

TABLE 4: HAZARDOUS CONCENTRATIONS OF AIRBORNE DUST

Constituent	Maximum Concentration (mg/kg in soil)	Airborne Dust Concentration at PEL
Anthracene	0.2	>1,000
Chrysene	0.45	>1,000
Phenanthrene	1.0	>1,000
Aldrin	0.00029	>1,000
delta-BHC	0.00048	>1,000
Heptachlor	0.0017	>1,000
Methoxychlor	0.002	>1,000
Boron (oxide)	91.5	>1,000
Selenium	2.9	>1,000

4.5 Polychlorinated Biphenyls - Hazards and Controls

PCBs may be present on the Lowry site in soil and groundwater (solubility is approximately 70 ppb) in isolated locations. PCBs were also identified in concrete rubble and a grease trap associated with Building 402. Health effects associated with exposure to PCBs include eye irritation, chloracne, liver damage and reproductive effects. PCBs have a very low vapor pressure, but can volatilize. Exposure routes include inhalation, ingestion and skin contact. Contaminated soil can be inhaled or ingested as airborne dust. Exposure levels will be maintained below OSHA PELs as shown in Table 5.

TABLE 5: PCB EXPOSURE LIMITS

Constituent	OSHA PEL ACGIH TLV mg/m^3
Chlorodiphenyl (42% chlorine)	1 (skin)/1 (skin)
Chlorodiphenyl (54% chlorine)	0.5 (skin)/0.5 (skin)

Generation of airborne dust during excavation or other invasive ground activities in areas where PCBs have been identified will be controlled through dust suppression measures. Neoprene, butyl rubber or Viton gloves will be worn for sampling tasks.

4.6 Friable and Non-friable Asbestos – Hazards and Controls

Asbestos has been identified on the Lowry site primarily from building demolition and the resulting debris. Friable and non-friable asbestos has been found during excavation or other soil preparation tasks. Asbestos exposure is associated with lung disease including asbestosis, mesothelioma, and lung cancer. Asbestos can also irritate the eyes.

Generation of airborne dust during excavation or other invasive ground activities in areas where asbestos has been identified will be controlled through dust suppression measures. Non-friable asbestos, when identified during these tasks, will be collected and disposed of in accordance with State requirements. Friable asbestos will be abated in accordance with the Asbestos Soil Characterization and Management Plan and applicable Colorado standards. Air

monitoring will be conducted around the perimeter of tasks where friable asbestos has been identified. Latex or nitrile gloves will be worn for sampling tasks.

4.7 Metals

Lead and mercury have been identified in isolated locations on the Lowry site. Lead has been detected in soil samples at the former Outdoor Firing Range. Mercury has been encountered in buildings housing former dental clinics. Significant abatement and subsequent sampling of mercury has been completed.

Exposure to lead can affect the gastrointestinal system, blood, CNS and neuromuscular system. Exposure can be controlled through dust suppression techniques. The OSHA PEL for elemental lead is 0.05 mg/m^3. Dust will be controlled during all excavation or other ground invasive activities to prevent exposure by this route.

Mercury can be absorbed through the skin, inhaled or ingested. Target organs include the kidneys, CNS and respiratory system. OSHA publishes a ceiling PEL for mercury of 0.1 mg/m^3 and specifies that an employee's exposure cannot exceed this limit.

Although the vapor pressure of mercury is low, it can volatilize. Volatilization is a function of temperature. Volatilization can be minimized by keeping the temperature in controlled abatement areas as low as possible. Volatilized mercury can be monitored on a real time basis with a mercury vapor analyzer or with colorimetric tubes and will be monitored as warranted.

4.8 Radiological Hazards

Extensive sampling and monitoring has been completed on the site to identify and characterize radiological hazards. There have been no radiological hazards identified on the site. Measured levels are associated with naturally occurring isotopes for Colorado and not with former usage or activities on the site.

4.9 Unexploded Ordnance/Weapons

IRG employees are not responsible for weapons or UXO hazards. UXO will be handled by a specialty contractor to LAC or by the Air Force, depending where they are found. All suspect nuclear, biological, chemical or other weapons will be handled directly by the Air Force. Contact information is provided in Section 10.0.

4.10 General Site Hazards and Controls

Numerous physical hazards may be present on site. Sound safety practices will be used to prevent injuries to site personnel. General hazards include slips, trips, falls, cuts, and abrasions. Mechanical hazards include entrapment or being struck by moving parts of heavy equipment or falling objects. Adequate distances will be maintained between personnel and rotating or moving mechanical equipment. Work areas will be maintained clean and free of debris that could cause slips, trips or falls including hoses and electrical cords.

Electrical hazards include contact with power lines during excavation or drilling activities. A minimum of at least 20 feet clearance will be maintained between drilling equipment and

overhead power lines. All equipment will be properly locked and/or tagged out when required by the Energy Lockout/Tagout Program.

Traffic cones and/or barricades will be used to maintain safe distances between vehicular traffic and work locations. Employees will wear orange traffic safety vests when work locations close to moving vehicular traffic cannot be avoided.

Colorado One-Call (1-800-922-1987) will be contacted and informed of scheduled field activities at least 48 hours prior to any drilling. The locator company will identify all underground utilities (e.g., electrical, gas, sewer, water, telephone, cable TV) that are present in the work area and notify their respective owners. Probing to a depth of 5 feet will be done where feasible to ensure no utilities, lines or tanks are in the way prior to drilling or excavating activities.

Heat stress precautions will be followed by IRG personnel when working during period of high ambient temperatures (especially in conjunction with high humidity). Adequate cool water and/or electrolyte-replacement beverages (e.g., Gatorade) should be available on site. Employees will be instructed to take frequent breaks out of direct sunlight and to remove protective clothing during breaks. The frequency of rest breaks will be increased if the resting pulse does not return to normal during the break period. Work schedules will be altered so that work may be conducted during cooler parts of the day (i.e., early morning or evening) when possible.

Symptoms of heat exhaustion and heat stress include:

- heavy sweating or complete cessation of sweating,
- changes in skin color,
- increased respiration,
- vision problems,
- dizziness,
- confusion,
- nausea,
- body temperatures in excess of 100°F, and
- increased heart rate.

Personnel exhibiting these symptoms will be removed immediately from the area and observed while resting in a shaded area. Impervious or restrictive clothing will be removed and the individual will be instructed to drink cool water or electrolyte-replacement fluid. Medical attention will be sought if symptoms persist.

The following hypothermia precautions will be followed when working in cold temperatures:

- Work breaks will be taken in a wind-sheltered area.
- Removable layers of insulated clothing will be worn to prevent sweating.
- Water-proof gear will be used when needed.
- Warm fluids will be available for drinking.

- Workers will be monitored for signs of shivering, incoordination, or confusion. Workers exhibiting these signs will be removed from the work area and allowed to warm up in a heated warming shelter.

Frost-bite (superficial or deep tissue) can occur on any exposed skin at temperatures of 30.2°F or colder. Employees will be instructed to wear adequate clothing to prevent hypothermia or frostbite (which can occur on any exposed skin).

5.0 TRAINING REQUIREMENTS

All IRG employees working on the Lowry Redevelopment site with field responsibilities and that may be exposed to potentially hazardous chemicals during the course of their work will be adequately trained. Training will meet the requirements of 29 CFR 1910.120 including the OSHA 40-hour HAZWOPER course and annual refresher training. The Project Manager and Oversight Coordinator training will also include the 1910.120 Supervisor course. The Oversight Coordinator will be current in CPR/First Aid.

Prior to working on the Lowry site, IRG field employees will read the site HASP and participate in a safety briefing that addresses the following:

- Job responsibilities,
- Anticipated hazards,
- Required training,
- Emergency response procedures,
- Route to hospital,
- Availability and location of emergency equipment such as first aid kit, eye wash, and fire extinguishers,
- Access control points when relevant, and
- Proper use and location of PPE.

IRG field personnel will participate in contractor tailgate safety meetings as follows:

- Conditions warrant air monitoring, and
- Hazards are suspected based on historical information.

6.0 PERSONAL PROTECTIVE EQUIPMENT

Personal protective equipment will consist of Level D protection for most tasks. For any task requiring respiratory protection, a separate Job Safety Analysis will be written. When accessing construction areas, personal protective equipment will include steel-toed work shoes/boots, cotton coveralls or long-sleeved shirts and long pants, and eye protection. A hard hat, hearing protection, and gloves will be used as needed. Hard hats will be required in construction areas or for any task with overhead hazards. Hearing protection will be utilized as follows:

TABLE 6: HEARING PROTECTION ACTION LEVELS

Noise Level	Protection
< 85 dBA	Wear hearing protection when it is necessary to raise voice to be heard at distance of 3 feet.
85 - 90 dBA	**Hearing protection required.** Install warning signs for fixed noise sources. Employer must have Hearing Conservation Program when employee noise exposures equal or exceed an 8-hour TWA of 85 dBA.
> 90 dBA	**Hearing protection required.**

If monitoring equipment or site conditions indicate the need to upgrade the level of protection to Level C, air-purifying respirators with organic vapor canisters (or other appropriate cartridges), Tyvek coveralls, Viton or other appropriate gloves, and disposable boot covers will be donned. This information will be specified in the written Job Safety Analysis.

7.0 MEDICAL SURVEILLANCE

OSHA requires that "all employees who are or may be exposed to hazardous substances or health hazards at or above the established permissible exposure limit, above the published exposure levels for these substances, without regard to the use of respirators, for 30 days or more a year or all employees who wear a respirator for 30 days or more a year" participate in a medical surveillance program. There are also other substance-specific OSHA standards (e.g., benzene) that require medical surveillance. None of these criteria are anticipated on the Lowry site. Employees will not participate in a medical surveillance program unless conditions change warranting a modification to the program.

Medical (emergency, hearing, etc.) and exposure monitoring records will be maintained in accordance with applicable standards. Employees and their representatives can access their records in accordance to 29 CFR 1910.1020.

8.0 AIR MONITORING

Air monitoring will be used to ensure that exposures to airborne hazards are identified and controlled. Air surveys will also be conducted to identify hazardous atmospheres such as those with insufficient oxygen or flammable vapors. Air monitoring is required when the potential for an exposure or hazardous atmosphere exists. Historical site characterization data will be evaluated to identify potential hazards in specific areas. Work areas with potentially hazardous atmospheres will be cordoned off and access to the area will be restricted.

Monitoring equipment will be maintained and calibrated in accordance with manufacturer's recommendations. Personnel utilizing the monitoring equipment will be adequately trained in the proper calibration and use of the instruments and in the accurate interpretation of monitoring results.

8.1 Organic Vapors

Organic vapor surveys will be conducted with a photoionization or flame ionization detector (PID or FID). The PID will be equipped with a 10.6 or 11.7 eV lamp. The 10.6 eV lamp is

adequate for many organic vapors including most petroleum constituents. However, most chlorinated solvents require the use of either an FID or PID equipped with an 11.7 eV lamp. For air monitoring tasks where chlorinated solvents are suspected, the 11.7 eV lamp will be used.

Colorimetric tubes will be utilized to identify suspected contaminants when elevated readings persist on the PID or FID. Benzene tubes will be utilized when petroleum is suspected or contaminants are unknown. Perchloroethylene tubes will be used to screen for chlorinated solvents. Colorimetric tubes or a real-time monitor will be used when mercury is suspected. Additional tubes will be utilized if other specific contaminants are identified through characterization data or historical records.

Survey instruments will be used to determine the source of the airborne hazard and to protect workers from exposure. Sources will be identified by monitoring close to suspected locations such as contaminated soil or water. Monitoring will be conducted upwind to identify background concentrations. Worker exposure levels will be assessed by evaluating contaminant concentrations in the breathing zone.

8.2 Airborne Dust

Generation of airborne dust will be controlled below visible levels through dust suppression techniques such as water spray. Data presented in Table 4 indicates that significant levels of airborne dust would have to be generated to reach published exposure levels for specific constituents. Routine dust monitoring is not warranted based on identified contaminant levels. Specific locations may warrant monitoring based on characterization data and will be determined by the Oversight Coordinator.

8.3 Combustible Gases

Explosive gases will be evaluated with a combustible gas indicator. Tasks warranting combustible gas monitoring include drilling, monitoring well installation, and container/tank sampling. The action level for combustible gases is 10% of the lower explosive limit. If combustible gases at concentrations greater than the action level are identified, work will stop until the concentration dissipates through natural or forced ventilation.

8.4 General Considerations

All instruments will be calibrated in accordance with manufacturer's recommendations and prior to starting work. Calibration information will be recorded in the logbook. Weather conditions will also be noted. Background readings will be taken upwind of the work area. Sources contributing to the airborne contaminant level will be identified.

Exposures will be maintained below published exposure levels through the use of air monitoring and adequate controls. The action levels specified in Table 7 were developed for use during excavating, trenching, or other invasive ground work. The use of air monitoring instrumentation and specified action levels will be used when airborne hazards are present or suspected. If contaminants can not be adequately characterized in the field, work will stop until airborne levels return to background or additional characterization data is obtained.

TABLE 7: ACTION LEVELS FOR AIR MONITORING INSTRUMENTATION

Instrument	Breathing Zone Reading	Action Taken
PID or FID for VOCs	Background – 2.5 ppm	**Level D** work may continue.
	2.5 - 10 ppm	Collect benzene detector tubes if petroleum is suspected.
	10 - 500 ppm	**Leave area.** Contact Project Manager if contaminant levels do not dissipate. Don air-purifying respirator with organic vapor canisters in accordance with Job Safety Analysis.
Benzene Colorimetric Detector Tubes	0 – 0.5 ppm	**Level D.** Work may continue.
	0.5 - 10 ppm	**Leave area.** Contact Project Manager. Don air-purifying respirator with organic vapor canisters in accordance with Job Safety Analysis.
Perchloroethylene Colorimetric Detector Tubes (other halogenated hydrocarbons will give a response on tube)	0 - 5 ppm	**Level D.** Work may continue.
	> 5 ppm	**Leave area.** Contact Project Manager.
Combustible Gas Meter	<10% of LEL	**Continue working.** Evaluate exposure levels to determine adequate respiratory protection.
	>10% of LEL	**Stop work and evacuate.** Eliminate all ignition sources and increase monitoring frequency. Ventilate work area.

Sampling of closed tanks or containers presents a unique hazard; contents may be under pressure presenting an increased inhalation risk. Containers and tanks will be evaluated to determine whether characterization data exists. If the contents of a container are unknown, a Job Safety Analysis will be written to ensure that adequate safety controls are utilized for sampling.

Confined spaces also present a unique hazard that must be evaluated on a case-by-case basis. Entry into permit required confined spaces, as defined by OSHA, are not anticipated on this site. If identified, confined spaces will be adequately assessed prior to entry for hazardous atmospheres including toxic gases, combustibles gases and oxygen deficiency. A permit system will be used for any space meeting the criteria established by OSHA in 29 CFR 1910.146.

A separate air sampling program has been developed for airborne asbestos sampling. Asbestos sampling criteria and action levels are included in the Asbestos Soil Characterization and Management Plan (Appendix of Soil Management Plan).

9.0 DECONTAMINATION

Decontamination areas will be established for equipment and personnel by contractors when warranted. IRG personnel will comply with work zones requirements when established by contractors in designated work areas.

Disposable boot covers, when used in areas where asbestos or other contaminants are present in the soil, will be disposed of with other contaminated debris when leaving the work area. Dirt or mud from construction sites will be removed from boots prior to leaving the site.

10.0 EMERGENCY RESPONSE

Site emergencies are unexpected, sudden events that present an immediate threat to site personnel, the public or the immediate environment. Potential emergency situations include those associated with residential or commercial areas including fires, vehicle accidents, injuries, and weather incidents. In addition, significant construction is ongoing and in various stages of completion; hazards exist due to heavy equipment operation and working in close proximity to overhead power lines or buried utilities.

10.1 Emergency Reporting

Any IRG employee identifying an emergency situation will immediately notify management personnel by contacting the site office. Immediate assistance will be requested as warranted via the 911 system for fire, medical, or police. Affected areas will be evacuated as warranted with the assistance of site personnel and emergency responders. Access into affected areas will be controlled to minimize risks. Immediate action is critical for minimizing the spread of the hazard or risk to the affected population.

When reporting an emergency, the following information should be conveyed to emergency responders:

- Name and number of person reporting incident,
- Location of incident,
- Nature of incident (fire, spill, medical emergency),
- Number of people involved,
- Hazardous material involved,
- Risk to surrounding population,
- Movement and direction of released materials,
- Quantity of hazardous materials involved,
- Controls and emergency measures currently implemented, and
- Other pertinent information or as requested.

10.2 Fire and Spill Response

Emergency fire fighting services are available through Denver Fire Station 14, District 5 located at 1426 Oneida Street, Denver. Fire extinguishers are located in subcontractor trailers, company vehicles and mounted on heavy equipment. In the event of a fire or explosion, evacuate the site

immediately and call for emergency assistance. In case of a spill, contain with clean dirt, if possible, and call the local fire department or hazardous materials response (HAZMAT) unit.

10.3 Medical Assistance

Hospitals in the immediate vicinity include:

THE MEDICAL CENTER OF AURORA

The Medical Center of Aurora North
700 Potomac Street
Aurora, CO 80011
Telephone: (303) 695-2600
(near I-225 and 6th Ave.)

The Medical Center of Aurora
1501 S Potomac Street
Denver, CO 80012
Telephone: (303) 695-2600
(near I-225 and Mississippi)

UNIVERSITY HOSPITAL

Fitzsimmons Campus
Colfax and Ursula
Aurora, CO
303-372-0000

9th & Colorado Campus
4200 E. Ninth Ave
Denver, CO
303-372-0000

Maps to these facilities are included in Appendix B. Emergency medical services will be contacted via the 911 system.

10.4 Ordnance Response

Nuclear, biological and chemical UXO are the responsibility of the Air Force. Notify LAC management immediately, if any of these materials are suspected or identified. LAC will contact the Air Force representative, Paul Carroll at (806) 885-5010 or (806) 438-1429 (cell) to report the suspected material.

10.5 Emergency Equipment

A standard first aid kit and a portable eye wash is available in the LAC offices located in Building 667 at 765 Uinta Way and in the Oversight Coordinator's vehicle. These items are also available in subcontractor trailers and company vehicles. Supplies in the first aid kit are available for use in case of minor injuries.

10.6 Communication

Communication will be maintained between the site office and the Oversight Coordinator via a cell phone. Site and emergency numbers are as follows:

Program Manager, Joe Aiken	(303) 972-6633
Project Manager, Elizabeth Sopher	(303) 326-7103
Oversight Coordinator	
Site Office	
Fire	911
Ambulance	911
Police	911

APPENDIX A
FORMS

SITE HEALTH AND SAFETY PLAN REVIEW RECORD

I have read and understood the contents of this Site Health and Safety Plan and I agree to abide by all provisions specified within.

Signature	Date

VISITOR STE HEALTH AND SAFETY PLAN REVIEW RECORD

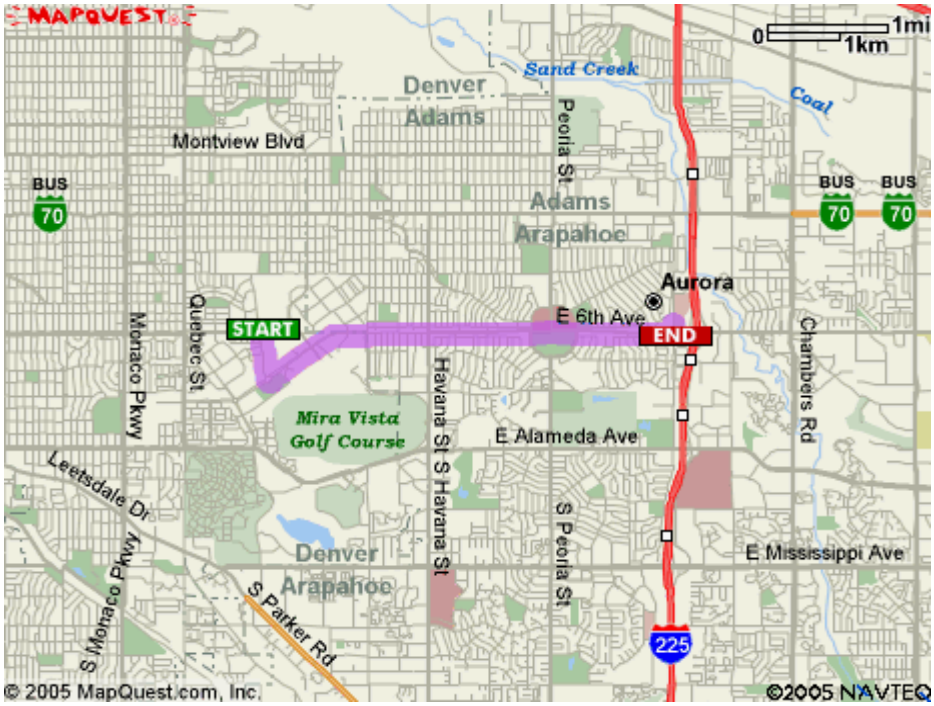
I have read the Site Health and Safety Plan and have discussed the nature of contaminants and the types of hazards present on the site with the Oversight Coordinator. I am aware of the levels of chemical exposures that could occur and will abide by the control procedures established in the plan.

Name	Signature	Affiliation	Date

APPENDIX B
ROUTES TO AREA HOSPITALS

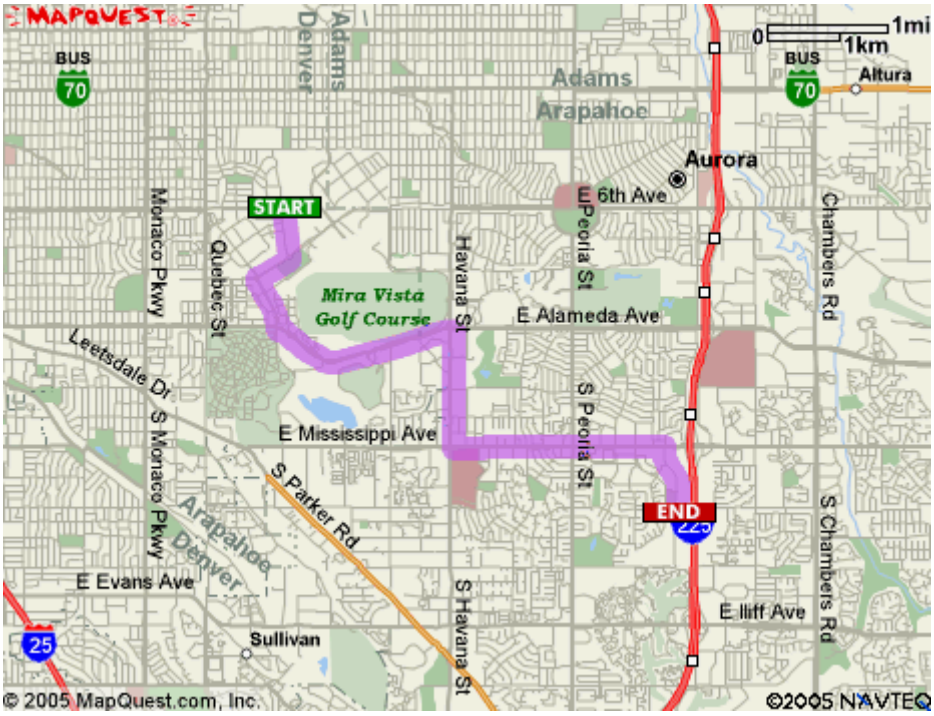
The Medical Center of Aurora North
700 Potomac Street
Aurora, CO 80011
Telephone: (303) 695-2600
(near I-225 and 6th Ave.)

Directions: East on East 6th Avenue for approximately 2.5 miles, North on Potomac for less than 0.5 miles.



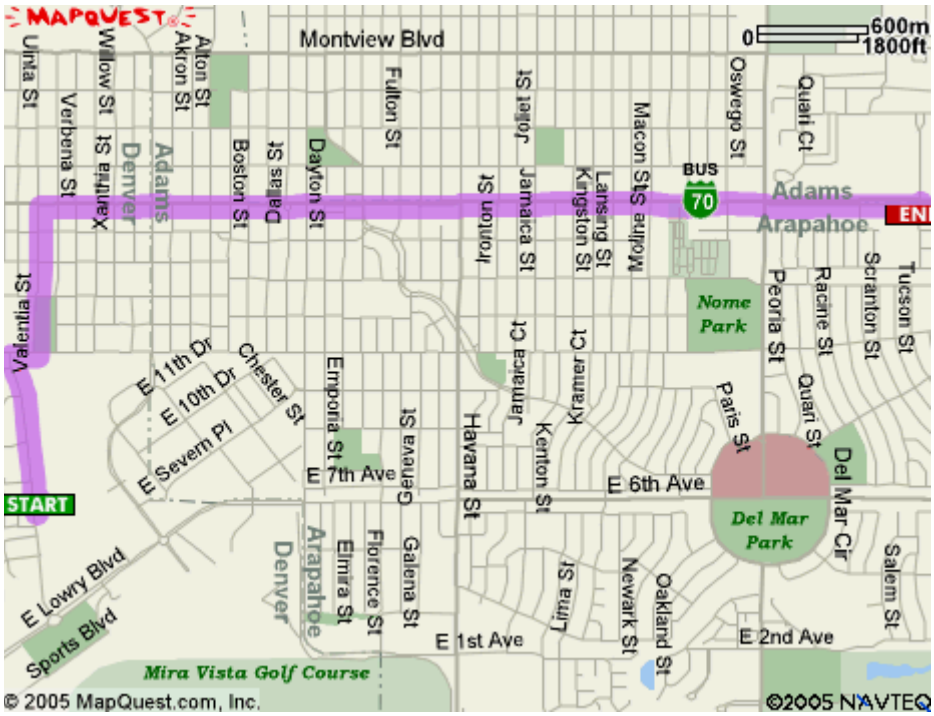
The Medical Center of Aurora
1501 S Potomac Street
Denver, CO 80012
Telephone: (303) 695-2600
(near I-225 and Mississippi

Directions: East on East Alameda Ave for 1.5 miles, South on South Havana St for 1mile, East on East Mississippi Ave for 1.7 miles, South on South Potomac for less than 0.5 miles.



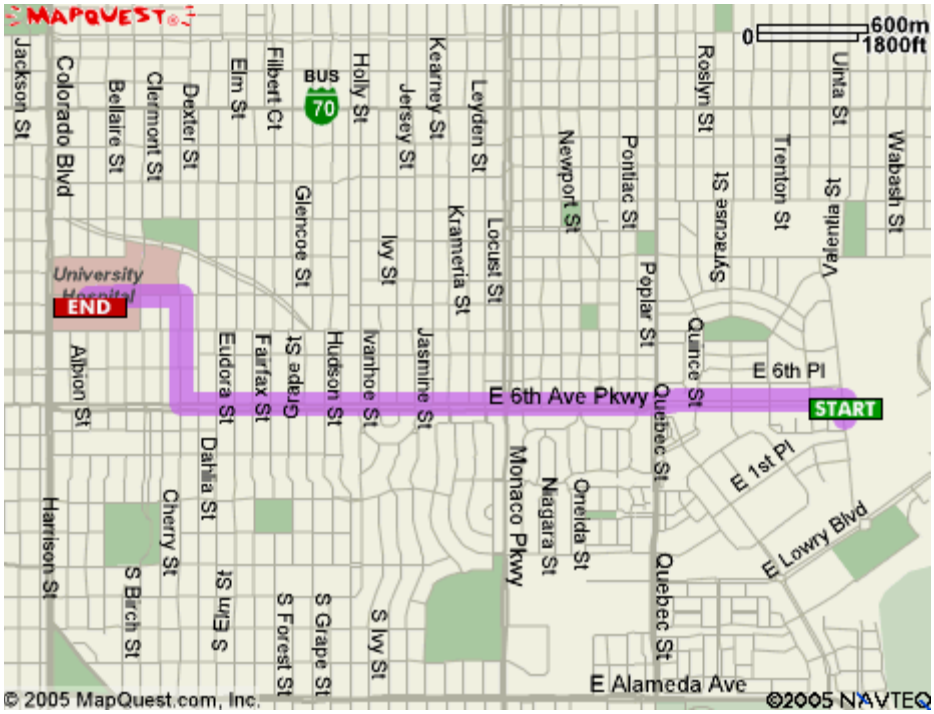
UNIVERSITY HOSPITAL
Fitzsimmons Campus
Colfax and Ursula
Aurora, CO
303-372-0000

Directions: East on Colfax Ave for 2.8 miles.



UNIVERSITY HOSPITAL
9th & Colorado Campus
4200 E. Ninth Ave
Denver, CO
303-372-0000

Directions: West on 6th Ave for 2.2 miles, North on Dexter St for 0.3 miles, West on East 9th Ave for 0.2 miles.



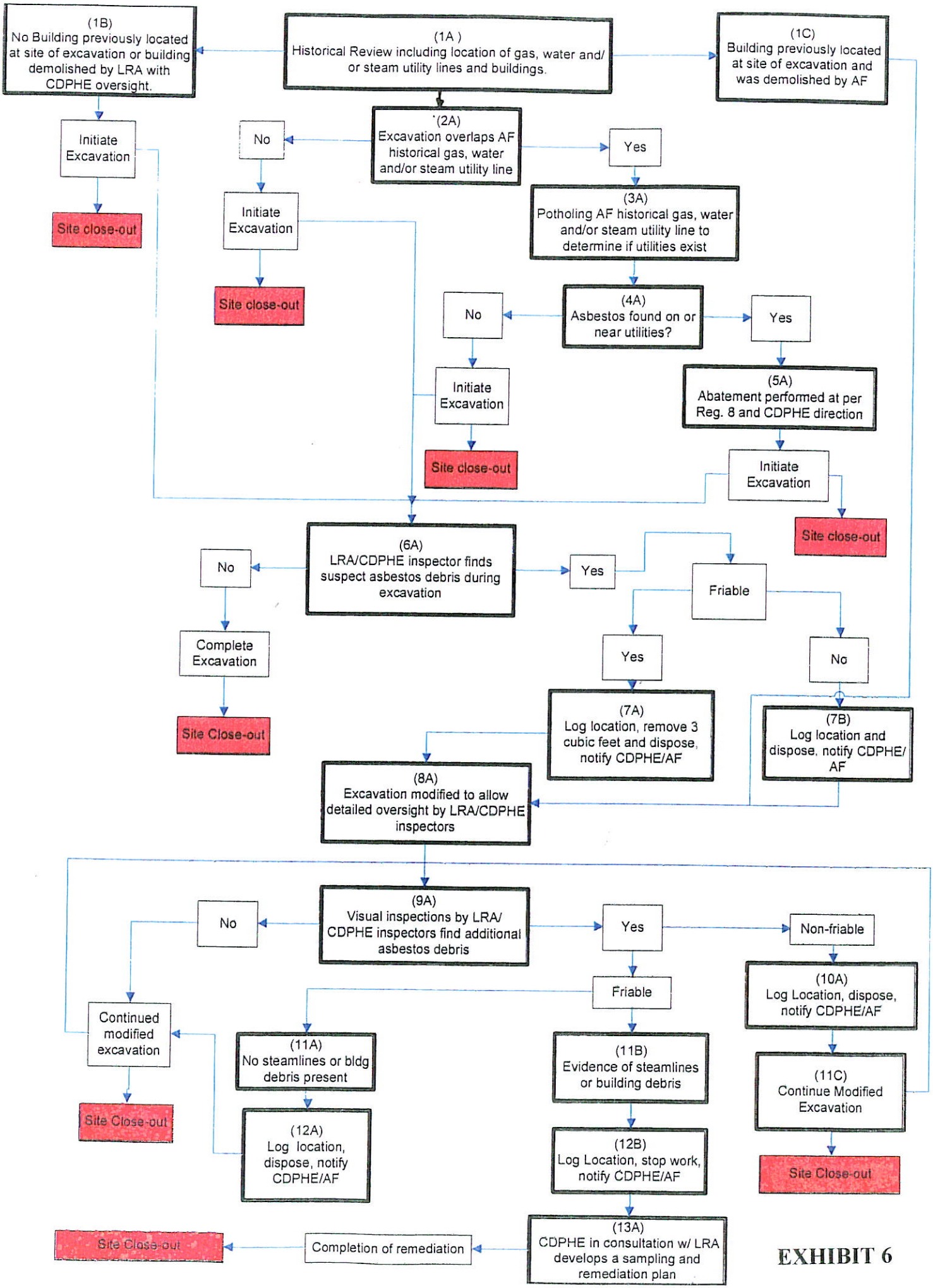

(1A) Historical Review including location of gas, water and/ or steam utility lines and buildings.
(1B) No Building previously located at site of excavation or building demolished by LRA with CDPHE oversight.
(1C) Building previously located at site of excavation and was demolished by AF
Initiate Excavation
Site close-out
(2A) Excavation overlaps AF historical gas, water and/or steam utility line
No
Yes
Initiate Excavation
Site close-out
(3A) Potholing AF historical gas, water and/or steam utility line to determine if utilities exist
(4A) Asbestos found on or near utilities?
No
Yes
Initiate Excavation
Site close-out
(5A) Abatement performed at per Reg. 8 and CDPHE direction
Initiate Excavation
Site close-out
(6A) LRA/CDPHE inspector finds suspect asbestos debris during excavation
No
Yes
Complete Excavation
Site Close-out
Friable
Yes
No
(7A) Log location, remove 3 cubic feet and dispose, notify CDPHE/AF
(7B) Log location and dispose, notify CDPHE/ AF
(8A) Excavation modified to allow detailed oversight by LRA/CDPHE inspectors
(9A) Visual inspections by LRA/ CDPHE inspectors find additional asbestos debris
No
Yes
Non-friable
Friable
(10A) Log Location, dispose, notify CDPHE/AF
Continued modified excavation
Site Close-out
(11A) No steamlines or bldg debris present
(12A) Log location, dispose, notify CDPHE/AF
(11B) Evidence of steamlines or building debris
(12B) Log Location, stop work, notify CDPHE/AF
(11C) Continue Modified Excavation
Site Close-out
(13A) CDPHE in consultation w/ LRA develops a sampling and remediation plan
Completion of remediation
Site Close-out

EXHIBIT 6

Exhibit 7

Asbestos Soil Characterization and Management Plan

In an effort to streamline response activities associated with discoveries of unknown asbestos in soils, Lowry Assumption, LLC (LAC) has developed this Asbestos Soil Characterization and Management Plan in accordance with the Colorado Solid Waste Regulations, 6 C.C.R. 1007-2, and Section 5.5. This Plan provides a predictable response and outlines the general procedures planned for identifying and removing asbestos in areas where an unplanned discovery occurs. For ease of reference, LAC has prepared revised asbestos in soils decision tree for its use on the project (See Figure 1 to Exhibit 7) based upon this Plan.

As established in the Environmental Services Cooperative Agreement, as amended, and the Consent Agreement, as amended, LAC will address discoveries of asbestos in soils as described below at LAFB except to the extent that it is an Air Force Obligation as defined in the Cooperative Agreement, as amended.

For this Plan, the property representatives and the contact for all parties performing soil disturbing activities are as follows:

Elizabeth Sopher or John Yerton
Lowry Assumption, LLC
Lowry Field Office
765 N. Uinta Way (Southwest Corner)
Denver, CO 80230
Telephone Number - (303) 972-6633

PROPERTY LOCATION

The former Lowry Air Force Base (LAFB) is located approximately five miles southeast of downtown Denver and included approximately 1,866 acres at the time of base closure. It is bounded generally by Quebec Street on the west, East 11th Avenue on the north, Dayton Street on the east, and Alameda Avenue on the south. Approximately 89 percent of Lowry is located in the City of Denver, and 11 percent is in the City of Aurora (See Figure 1-1 of the Transition Plan – Site Location Map).

1. General Site Description

LAFB operated from 1937 to 1994 as an Air Force technical training center. In many ways, activities at Lowry were similar to those in other communities of the time. A coal-powered steam plant provided heat, gas stations fueled vehicles, municipal waste was taken to a landfill, and machine parts were cleaned with solvents. Fuels and chemicals were stored and used to support the training activities, and disposal of these liquids was conducted using standard waste-handling practices of the day. These activities were undertaken according to what were then generally accepted practices.

Asbestos from building debris and utilities have been discovered and remediated at LAFB. In the Northwest Neighborhood (NWN) of LAFB (8th to 11th Avenue, Quebec Street to Uinta Way) and at several other locations on the former base, friable asbestos in soil has been identified. The asbestos that has been found is primarily related to thermal system insulation, including steam lines and insulation from hot water systems, or tiling, wallboard, attic insulation, and other similar building materials used at LAFB.

2. Description of Proposed Soil Disturbing Activities

The remaining development activities at LAFB include completion of the residential, commercial and recreational development. These activities will result in soil excavation activities, as defined in Section D of the Soils Management Plan (Draft Final Transition Plan II, Section VII), as follows:

Excavation means foundation excavations, underground utility installations, and other material excavations of the land surface. Excavation excludes the following: normal maintenance and operation associated with the current ownership of already redeveloped commercial or residential property; clearing and grubbing; site preparation; normal maintenance and operation of the golf course; existing parks, including repairs and maintenance to sprinkler systems; and planting of flowers, trees and shrubs. Existing roads and right of ways not located in the NWN of LAFB are also excluded.

As described in the Soils Management Plan and in Section 3 below, LAC will provide construction oversight for soil excavation activities associated with the redevelopment including:

- Utility removal and installation
- Grading
- Foundation excavations
- Park and open space construction

Oversight will not be performed by LAC on routine maintenance activities, including, but not limited to, repairs and maintenance to sprinkler systems, planting of flowers, shrubs and trees, and home repairs. However, if visible material containing asbestos or asbestos-contaminated soils is unexpectedly discovered during routine maintenance activities, LAC will provide characterization, oversight and remedial services, if required.

3. Description of Proposed Soil Sampling /Characterization

In order to mitigate any potential release or threatened release of asbestos fibers as a result of redevelopment activities, LAC will provide construction oversight for soil disturbing activities at LAFB. LAC is coordinating closely with the Lowry Economic Redevelopment Authority (LERA) on notifying potential purchasers of the property about the Soils Management Plan ("SMP") and the oversight requirements of LAC under the Consent Agreement. LAC has entered, and will enter, into separate oversight agreements with LERA, as well as each developer, the Colorado Golf Association, and the Colorado Community College System in order to execute this task. The property owner/builder is responsible for compliance with all applicable laws and regulations during all excavation activities that are not the subject to the Consent Agreement.

Construction oversight includes the necessary observation and documentation of soil excavation activities within the geographic boundaries of LAFB, excluding the Buckley Annex (also known as Defense Finance and Accounting Services or DFAS) property west of Quebec Street, with the intent of identifying any ACM and minimizing potential releases to the environment. This oversight will include visual observations during the excavation of soil during the Project as defined in the Consent Agreement.

The following is the process for LAC's construction oversight:

(a) The asbestos construction oversight process will be initiated when a dig notification is submitted to the LAC oversight coordinator by phone: 303-972-6633. Dig notifications are required by contract on all excavations, and if a dig notification is not given and excavation is done on a site, LAC will stop the excavation until an inspector is available.

(b) LAC will perform a review of the environmental record for each location.

(c) LAC will provide oversight of the excavation, including monitoring when material is stockpiled or transferred to another location at LAFB. Each inspector will have a minimum of OSHA 40 Hour training and a Colorado Department of Public Health and Environment (CDPHE) Regulation 8 Building Inspector or other appropriate certificate (i.e., Abatement Worker or Air Monitoring Specialist ("AMS")).

(d) If the inspector identifies potentially asbestos contaminated media, s/he shall immediately stop work on the suspect material and notify the LAC Oversight Coordinator at 303-972-6633 (See Figure 1 to Exhibit 7, Flow Chart).

The LAC Oversight Coordinator will confirm the observations and determine whether additional investigation or response must be performed before construction activities may resume with oversight. This will be based upon whether the potentially asbestos contaminated media falls within the applicability of 6 CCR 1007-2, Section 5.5, and/or any of the exemptions under 6 CCR 1007-2, Section 5.5.2.

If soil sampling or characterization is required by CDPHE in accordance with Paragraph 18i of the Consent Agreement, LAC will work with the CDPHE on a case by case basis under the Consent Agreement protocols, including the location of any proposed sampling, a proposed sampling plan and methodology, proposed analytical method, and documentation requirements. Such documents will be subject to CDPHE review and approval.

4. Proposed Exposure Mitigation and Asbestos Fiber Control Measures

If visible material containing asbestos or asbestos-contaminated soils is unexpectedly discovered during soil-disturbing activities, LAC shall inform CDPHE within 24 hours of the discovery, and implement the following protocols.

Access Restriction

Suspect material and impacted soils will be segregated and stockpiled, wetted and covered with polyethylene until an abatement contractor removes and disposes of the material as friable asbestos waste. The stockpiles will be placed on 6 mil polyethylene, or, when removed, 6

inches of soil beneath the pile will be removed with the pile. Access will be restricted with fencing or caution tape as appropriate to the location and the size of the stockpile or excavation.

Air Monitoring Plan

Project Oversight - A CDPHE certified Air Monitoring Specialist (AMS) will be on-site during all soil remediation activities. The AMS will perform oversight and air monitoring during the removal of contaminated soils. The AMS will perform the daily air monitoring activities described below, and the final visual inspections of soil removal locations.

Air Monitoring - Daily air monitoring will be performed when removing soil: perimeter samplers will surround the work area where the greatest likelihood of asbestos fibers release is expected. The CDPHE-certified AMS will perform the air monitoring activities and determine the quantity and location of the air samples and the number of blank QC samples.

Daily air monitoring will consist of PCM sampling protocol and analysis using NIOSH 7400 Method "A" Rules as required by CDPHE as set forth by the on-site AMS. The samples shall cover all four (4) points of the compass and shall be located as close as possible to the excavation activities. Special emphasis will be placed on areas where residential housing, schools or businesses are nearby.

After analysis of work area samples, if an air sample, analyzed by PCM, contains fiber concentrations above the Maximum Allowable Asbestos Level (MAAL, 0.01 fibers per cubic centimeter), work practices will be reviewed, and TEM samples will be collected the following day. If the TEM sample exceeds the airborne asbestos fiber concentration MAAL (70 structures per millimeters squared), CDPHE shall be notified. Coincident with this reporting, soil removal activities will cease, and a revised emissions control plan will be developed and submitted to the CDPHE to remedy the engineering control issues. Such additional controls may include additional water application, repositioning of equipment and sprayers, or adjustment in work pace. Soil removal will not continue until the CDPHE provides verbal or written authorization to proceed.

The AMS will monitor the work practices of the abatement contractor during soil removal activities. The AMS will ensure the proper wet methods are being used, look for visible emissions around the work area, monitor wind speed and check for visible dust/debris in the area. The AMS will maintain updated air monitoring logs and notes. Air results will be kept on-site and available for review.

All removal activities shall immediately cease when there are sustained winds exceeding 12 miles per hour (mph) for 10 minutes as determined by hand-held on-site instrumentation, or when there are wind gusts in excess of 20 mph.

Work will not be restarted after a high wind stoppage until all wind gust readings drop below 20 mph, and sustained wind drop below 12 mph, for a period of 20 minutes, as determined by hand-held on-site instrumentation.

Emissions Control Plan

The abatement activities will be performed under the following controls including:

- A barrier fence will be installed around the work area.

- A minimum of 6 foot tall fencing with wind screen will be installed around the contaminated soil area. This fencing can only be taken down permanently once the abatement activities have been completed and the area has been cleared by visual inspection by the AMS.

- Areas directly outside the contaminated soil work area that could be impacted by removal shall be covered in 6-mil polyethylene (poly) sheeting.

- A temporary haul road shall be installed if necessary to facilitate the loading of contaminated material into trucks or containers.

- Water will be used to adequately wet the contaminated soil before removal begins.

- The abatement contractor will utilize workers and supervisors that are certified by the CDPHE Air Pollution Control Division and have current documentation.

- After the work area is approved by the AMS/Inspector (i.e. proper engineering controls are in place, adequate saturation of water in soil), soil excavation and removal activities can begin.

- At the truck loading station, a loading pad, made of 12 mil polyethylene, will be used to prevent track-out. The pad will be cleaned as necessary between loads. In addition, tracking materials will be placed at site exit point to prevent track-out.

- The area of impact during excavation and removal activities will be kept adequately wet. The water will be applied using a low flow so as not to generate any run-off.

- Adequate amounts of water will be sprayed onto the point of excavation and the bucket of the loading equipment during all phases of the excavation/removal/load process.

- The equipment operator will collect the contaminated soil and load the soil into the disposal container/trailer. The container/trailer will be lined with 6-mil poly. If the soil being removed has visible asbestos material, the container/trailer will be double lined.

- If contaminated soil is stockpiled prior to loading due to site limitations, it will be placed on 6 mil poly or 6 inches of soil beneath the stockpile will be removed. The pile will be covered with 6 mil poly if it is left onsite after daily operations are suspended.

- In order to minimize the potential for spilling any contaminated soil, the operator will load soil slowly, the bucket will not be overfilled, and the operator will dump soil as low as possible inside the disposal container. A water mist will be sprayed on the bucket and truck bed at the loading point to minimize emissions.

- The AMS/Inspector will watch all excavation and removal activities to look for visible dust/debris to ensure that adequate amounts of water are being applied to the soil in all stages of excavation and removal.

- After the soil removal is finished, and the area has dried out adequately, the AMS will perform a visual inspection to ensure that all asbestos-containing material has been removed from the work area.

- Appropriate PPE will be worn, and a decontamination unit will be utilized to ensure that no ACM is tracked out of the site.

- After all removal activities have finished for this project, the abatement crew will thoroughly clean all equipment before removal from the site.

5. Exposure Mitigation Plan for Asbestos Left in Place

Removal of soil containing asbestos will continue to the limits of the planned excavation, the excavation will be cleared of visible debris, and clean fill will be brought in for backfill. This clearance will be performed by the AMS.

However, if known asbestos in soils are left in place as allowed under the Colorado Solid Waste Regulations, LAC will inform the Owner and the Department of the location and depth of the known asbestos in soils. Under these circumstances, the property will be subject to the Colorado Environmental Covenant Statute, C.R.S 25-15-120 et seq.

6. Disposal of Asbestos-Containing Material or Asbestos-Contaminated Soil

- Segregation of Material
  - Disturbed soils will characterized by the LAC inspector, during oversight. Asbestos-contaminated soils will be characterized and segregated from non-asbestos containing soils based on visual observation. Samples of building debris will be taken where necessary to confirm asbestos content.

- Waste Handling
  - Loading - Trucks will be loaded at the truck loading station, a loading pad, made of 12 mil polyethylene, that will be used to prevent track-out. The pad will be cleaned as necessary between loads. In addition, tracking materials will be placed at site exit point to prevent track-out. Adequate amounts of water will be sprayed onto the bucket of the loading equipment and the truck bed during load process to limit emissions.

  - Packaging - 6 mil poly will be used to line trucks, and a double liner will be used for soils containing visible friable ACM. The soil will be sealed in a burrito wrap the truck will be covered.

  - Transportation - After each waste container/trailer is filled, the waste container/trailer will be sealed, appropriately labeled, manifested and transported to the landfill.

- Disposal - The asbestos-containing material, associated soils, non-friable ACM, and asbestos-contaminated soil containing no visible asbestos will be disposed in accordance with State solid waste regulations, in accordance with 6 CCR 1007-2, Part 1, Section 5.5.7.

7. Disposal of Asbestos-Containing Material or Asbestos-Contaminated Soil and Project Closeout

Under Section 5.5 of the Solid Waste Regulations, project close-out reports for asbestos-contaminated soil management projects are not required to be submitted to CDPHE. However, those projects conducted under Paragraph 18i of the Consent Agreement will require LAC to submit, review and provide CDPHE with a Completion Report under Paragraph 50.
For all asbestos projects, LAC will maintain complete documentation of the project including:

- Property description and description of area(s) with asbestos-contaminated soil;
- Description of soil disturbing activities;
- Logs of field operations;
- Air monitoring logs and analytical results where applicable;
- Disposal manifests;
- Maps showing the location of any asbestos left in place (where appropriate);
- Description of any engineering or institutional controls for any asbestos left in place;
- Photographs showing pre- and post-removal conditions; and
- Worker certifications.

For those projects not subject to Paragraph 18i of the Consent Agreement, LAC will submit a Letter Report containing documentation of asbestos management to CDPHE containing the following information:

- Property description and project location
- Project description and history
- Documentation of 10-day notice submittal or other notification
- Summary of removal activities, and
- Disposal documentation

If soil sampling or characterization is required by CDPHE in accordance with Paragraph 18i of the Consent Agreement, for these projects,

- LAC will submit plans within thirty (30) days to CDPHE for review (Paragraph 26);
- LAC will submit a revised work plan within forty-five (45) days of receipt of CDPHE comments (Paragraph 28);
- Within fifteen (15) days of CDPHE approval, LAC will implement the plan (Paragraph 29);
- LAC will submit a written report to the CDPHE within thirty (30) days of completing the implementation of the plans (Paragraph 30);

- If the CDPHE determines that the nature and extent of contamination has not been characterized adequately, LAC will submit within forty-five (45) days a revised work plan for additional characterization;

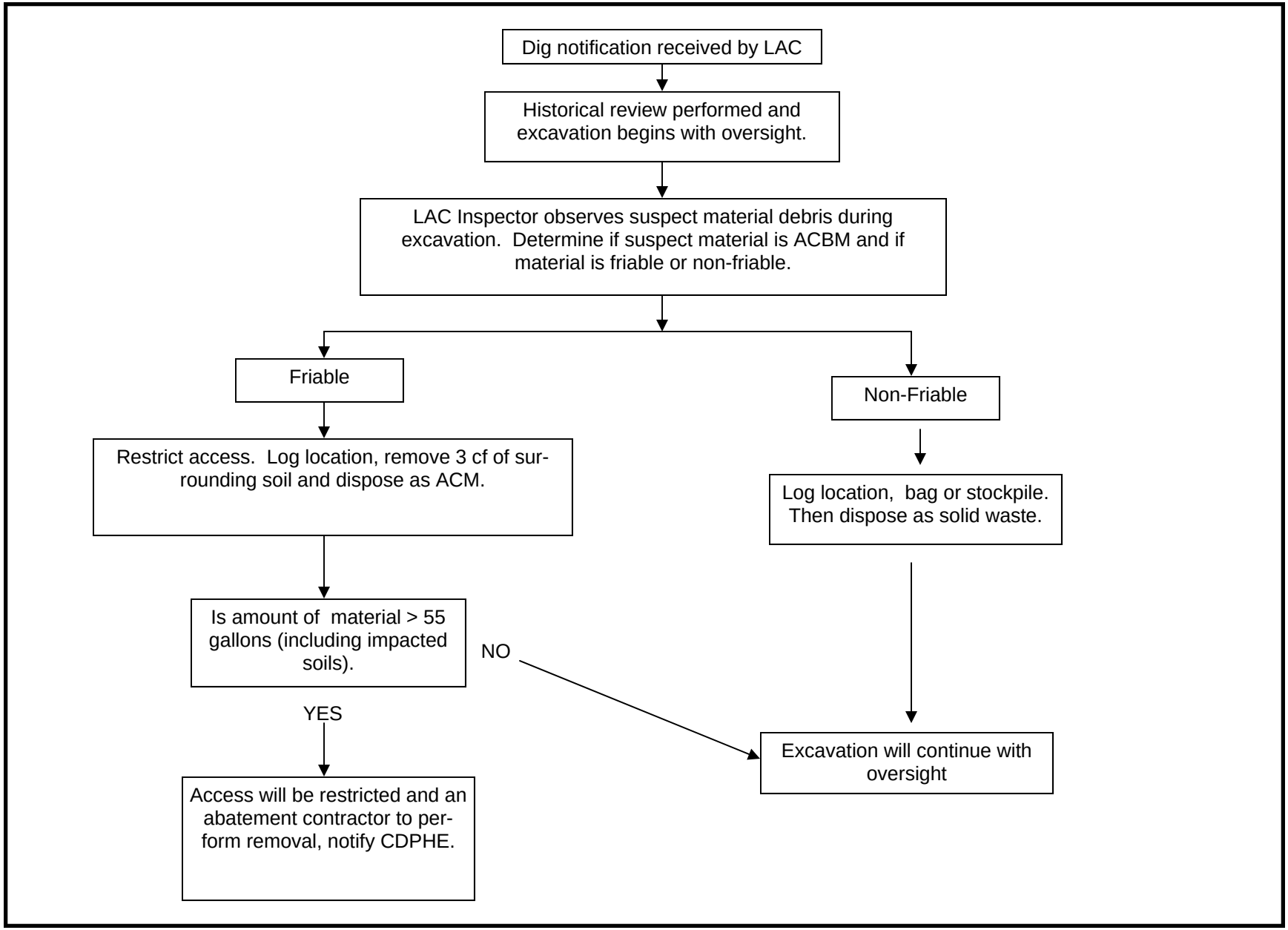
- Within forty-five (45) days of the CDPHE's determination that the contamination has been adequately characterized and that remediation is necessary, LAC will submit a CAP, if determined necessary by the CDPHE (Paragraph 34);

- Pursuant to Paragraph 50, within ninety (90) days of completion of corrective action measures required by the CDPHE, either through CAP or interim actions or other actions executed pursuant to the Consent Agreement, LAC shall submit Completion Reports to CDPHE.

Signature of Project Designer

Jeff Knight, Hudspeth and Associates
Certification # 4172

Exhibit 7 Figure 1
LAFB Asbestos in Soils Flow Chart



Lowry AFB

Final Transition Plan II
Former Lowry Air Force Base
Denver and Aurora, Colorado
Responsiveness Summary:
Section IV – Corrective Action Process

C. Proposed Investigations

II. Asbestos in Soils in the NWN

I think this section should mention that certain areas will have priority for sampling and remediation which means that the work will be done in phases and not all at once. The phases should be described and the expected schedule for each should be documented.

The actions to be taken in the short term for Building 667 should also be mentioned vs. the long-term actions.

Also, the access given to the AF for their risk assessment and the intent that this will not delay the cleanup should also be mentioned.

- *The text has been revised.*

III. RFA Soil Data Gaps Investigations

I am not sure why the first 3 areas are split by "Other Data Gaps" from the other 4 areas. It is not clear from the text, other than the last four do not have separate Corrective Action comments, which I believe they should.

The text says this work plan will be submitted 60 days (page 4-5) after the Final RFA is approved, but Figure 4-1 says 90 days. I think the 60 days is more reasonable.

- *The text has been revised.*

Figure 4 – 1 Project Schedule

My main comment on this schedule is that we should see the breakout for different categories with expected timeframes as set up in the Consent Agreement:

Work plan submittal – Specific date provided in the Transition Plan
Work plan review CDPHE – within 45 days
Work plan approval CDPHE
Investigation/field work – within 15 days of work plan approval
Report submittal – within 30 days of completing implementation of work plan
Report review CDPHE – within 45 days
Report approval CDPHE
NFA

Under the First Amendment to the Consent Agreement, new paragraph 26, "…the LAC shall submit the work plans pursuant to the schedules contained in the approved draft Transition Plan or Transition Plan Part II for Department review and approval…" The schedule provided should have submittal dates for all work plans.

- *The text and schedule have been revised.*

Final Transition Plan II
Former Lowry Air Force Base
Denver and Aurora, Colorado
Responsiveness Summary:
Asbestos Soil Characterization and Management Plan

Monica, we have revised the document in response to your comments. Specific responses are provided below your comments. Please let us know if you would like to discuss any of the revisions.

General Comments:

1. With regard to the introductory paragraph on page 1: I think that the reasoning for providing this plan is incorrect as stated. Specifically, in paragraph 1 you state that "This plan provides a predictable response for identifying and removing asbestos in areas where there is no reason to know of asbestos contaminated soil at a site, and no reason to believe that visible asbestos will be encountered." I think that the opposite is true, you have developed this plan because "you have reason to know or believe that asbestos will be encountered."

- We do not have reason to believe or have knowledge of known asbestos to be encountered, except in the NWN, Falcon Point, and Denver Indian Center. We are putting this plan in place to address “unplanned” discoveries of asbestos.

2. Paragraph 2: Please clarify the exclusion of the Lowry Campus of the Colorado Community College System. Either directly reference the provision of the consent agreement, or better yet, describe the exact location excluded so that future readers 20 years down the road know how the exclusion works.

- The text has been modified to refer to the Air Force obligations as defined in the Cooperative Agreement as amended.

3. Please add the following information:

a. Property representative's name and phone number (this can be the same as the contact name performing the soil disturbing activities, if that is the case). Just state so.

- The text states that the contact is also the property representative.

b. Need to add detail about documentation as set forth in the state's guidance - essentially detailing the closeout documentation that shall be provided for department review and approval.

- A new section has been added describing closeout documentation. We have divided this section into (1) what is required under the new reg; and (2) what is required under our Consent Agreement. The decision will need to be made whether an asbestos discovery should fall into the Consent Agreement (i.e. require additional documentation, etc.) or can be addressed under the regulations.

c. This plan needs to be prepared and signed by an Asbestos Project Designer, to meet the regulatory requirements.

- A Project Designer from Hudspeth & Associates has reviewed earlier versions of this plan and will sign off on the Plan after final changes have been agreed to.

Specific Comments:

1. Page 2., Section 2. Description of Proposed Soil Disturbing Activities, 1st paragraph: please set forth what "Section D" of the soils management plan says, so you don't have to go to the section, but rather that you have the meaning here.

- The text has been revised.

2. Page 2., Section 2. Description of Proposed Soil Disturbing Activities, 2nd paragraph after the bullets; line 4: "during routine soil disturbing activities" should be changed to "during routine maintenance activities."

- The text has been revised.

3. Page 2, Section 3. Description of Proposed Soil Sampling/Characterization, 2nd paragraph: Please describe the DFAS facility and spell out which building this is. The average reader would not know what “DFAS” is.

- The text has been revised.

4. Page 2, Section 3. Description of Proposed Soil Sampling/Characterization, 3rd paragraph: It is not clear to me why you are describing the excavation here in this paragraph, it seems somewhat duplicative to the info contained in the end of #2 (Proposed Soil Disturbing Activities described above). Please clarify.

- The section has been deleted.

5. Page 3, Section 3. Description of Proposed Soil Sampling/Characterization, 3rd paragraph, (b): Substitute the following: "LAC will perform a review of the environmental record for each location."

- The text has been revised.

6. Page 3, Section 3. Description of Proposed Soil Sampling/Characterization, 3rd paragraph, last section: According to the plan, the Sampling and Characterization will be addressed on case by case basis at a later time. Please also note that such plan will be subject to Department Review and Approval.

- The text has been revised.

7. Page 4, Air Monitoring: Please add detail regarding the sampling methodology and frequency; and detail about QA/QC.

- A reference to QC/blank samples has been added. The remainder of the analytical QC requirements are included in the NIOSH 7400 method. Would you like us to attach a copy of the method?

8. Page 6, Exposure Mitigation Plan for Asbestos Left in Place: Please add language saying that the plan is subject to Department review and approval. Also, please provide further detail about the procedures for demarcating any known asbestos contamination left in the sidewalls. Any left in place will also need to be noted in the deed, and the as-built drawings for the property.

- The Environmental Covenant Statute is between the Owner of the property and CDPHE. LAC does not own any of the subject property. Thus any encumbrances on the property due to asbestos left in place would be between the Owner and CDPHE. LAC will inform both parties if asbestos is left in place.

Draft Final Transition Plan II
Former Lowry Air Force Base
Denver and Aurora, Colorado
Responsiveness Summary

The following is the Responsiveness Summary to comments received from the Colorado Department of Public Health and Environment (CDPHE), City and County of Denver (Denver), and community members, including the Restoration Advisory Board (RAB). Lowry Assumption, LLC (LAC) received no written comments from the City of Aurora (Aurora) or the Environmental Protection Agency (EPA). In accordance with the Consent Agreement, LAC held a public meeting discussing the Draft Transition Plan II on March 15, 2006. A public notice was published by the Denver Newspaper Agency to the Denver Post and Rocky Mountain News combined distribution announcing this meeting. In addition, the meeting was also advertised on www.lowrylink.org, and through the email to the Privatization Stakeholder Advisory Group, Restoration Advisory Board, and neighborhood association distribution lists.

I. CDPHE General Comments

Comment - Section II - Nature and Extent of Environmental Impacts
A figure should be included that identifies the locations of the areas and/or buildings to have additional investigation associated with RCRA Facility Assessment (RFA).

Response: Figure 1-1 has been added that shows all areas where environmental work will be done under Lowry 2, including building numbers.

Comment - Section III - Description of Anticipated Future Use and LERA's Reuse Priorities. The figures referenced seem to be more focused on the environmental impacts than on the reuse. A figure should be included that clearly shows the reuse categories. For example, the residential areas, commercial, open space, flood control, golf course, etc.

Response: A new figure (3-1) has been created that overlay the environmental conditions onto a general reuse map.

Comment - Section IV - Corrective Action Process
This section should contain a specific schedule for all submittals following the approval of this plan. The discussion of the RFA data gaps investigation should also discuss the soil investigations in detail and present a schedule for their implementation.

Response: The schedule for corrective actions has been made more specific (see Figure 4-1). The schedule for the soils data gap investigation associated with the RFA has been

clarified showing that the work plan will be submitted to CDPHE within 90 days of the final approval of the RFA.

Comment - Section V - Applicable State and Federal Standards Associated with Remediation. It should be noted that Table 1 of the 1997 CDPHE document titled *Proposed Soil Remediation Objectives Policy Document* (SRO) was revised in June 2004.

Response: The revision date has been added to the text and Table 5-1.

Comment - Section VII - Soils Management Plan. CDPHE submitted comments to an earlier version of this plan. Our previous comments have been incorporated. Action levels for soil remediation must be protective of groundwater quality.

Response: The Lowry Soil Action Levels Table (Table 5-1) has been revised to include groundwater protection standards.

Comment - Exhibit 7-Asbestos Soil Characterization and Management Plan. Throughout the document the terms of art: asbestos debris, asbestos containing material, asbestos materials, ACM are used interchangeably (sometimes intentionally and others, randomly). These all have potentially different/conflicting legal connotations. Please double check the entire document consistent with the new SW regulations to ensure that you are using these terms correctly and consistently.

Response: The terms have been made consistent with the new Solid Waste regulation definitions on asbestos in soils.

II. CDPHE Specific comments

Edits and comments made in the red-line copy of the Plan have been made by LAC. Responses to additional questions provided in that copy are below.

Comment - Section III - Do we have a reconfigured golf course map - or is this something the CGA is still working on? Any major changes?

Response: LAC's understanding is that CGA is currently working on a plan for renovation of the Golf Course. LAC does not know the status of this document.

Comment - Exhibit VII - Why did you delete the requirement to notify the property owner?

Response: Through current and new contracts with the LERA, the property owner is responsible for notifying LAC of the excavation. For others such as the CGA and CCCS, LAC has separate Oversight Agreements that require notification prior to excavation.

III. City and County of Denver Comments

The requested edits have been made by LAC.

Comment - p. 1-9, 4th full paragraph - Denver requests an electronic copy of the LRA library index.

Response: LAC provided an electronic copy of the LERA library index to Denver on May 22, 2006.

Comment - p. 4-6, section F.II. - is annual training going to be made available to Denver, Aurora and utility company personnel?

Response: The training will be made available to workers for Denver, Aurora, utility companies, as well as other property owners/developers and their workers. The text term "Owners and their workers" would include these groups.

Comment - Table 1 – soil action levels should be protective of groundwater; 0's should be replaced with dashes unless LAC intends to set the action level at the detection limit.

Response: The action levels have been changed to groundwater protection standards, and the 0's have been removed.

Comment - Comments regarding Exhibit 6.

Response: Exhibit 6 is the current Lowry Asbestos Decision Tree, shown for reference. New procedures, described in Exhibit 7, the Asbestos Characterization and Management Plan incorporate the existing protocols and the current regulation into an updated procedure.

IV. Comments from RAB Technical Support Contractor, Sarah Jones

Comment - Section II Part A – OU2, pg. 2-6 - Just a heads up that this section might need to be revised based on the discussion between LAC and CDPHE about what radiological parameters will be measured as part of the OU2 post-closure monitoring.

Response: The section has been revised to only address the results of the radiological parameter monitoring. Groundwater is being addressed under Lowry 1.

Comment - Section II Part B – OU5, pg. 2-7 - Could you please clarify if the investigations of contamination in bedrock and carbon tetrachloride are part of the SGCP.

Response: See above, the section has been revised.

Comment - Section III Part B – OU2, pg. 3-2 - Could you either discuss what the review process would be for land use change at OU2 or reference a document with this discussion. In general – for any of these sites (ex. FTZ, PAA-2), what is the process for review of proposed land use change and removal or change in environmental covenants?

Response: Any change in use is subject to the public review processes of the LERA for design/development issues and the regulating agencies including the Air Force, CDPHE, the Corps of Engineers, the Cities of Denver or Aurora for zoning, entitlements, easements, covenants, etc.

Comment - Section IV Part C – RFA Data Gaps Investigation, pg. 4-5 - Although there is no mention of an RFA Soils Data Gaps Investigation in this section, it is referenced in the description of the RFA Groundwater Data Gaps Investigation. Please add a discussion of the soils investigation. (Earlier sections identified these sites – 898, 416, 546,753, 1496A, 1499, 777, and several PCB transformer areas as requiring further investigation. If these are not all going to be in the RFA soils data gap investigation than they should also be mentioned in Part C of Section IV).

Response: The text has been revised.

Comment - Section V, pg. 5-1 - Please clarify where the ARARs analysis will be provided.

Response: The ARARs analysis has been provided in Section V.

Comment - Section VI Part C – State Environmental Covenants, pg. 6-5 - Please clarify whether LAC or the Air Force will perform all of the requirements set forth in section 3 and 4 of the Post-Closure Operations and Maintenance Plan.

Response: LAC will perform these requirements initially. The Air Force will be responsible once LAC finishes its requirements.

Comment - Section VII Part D, Task 1 – Oversight Procedure, pg. 7-6 - What should the oversight technician do if he/she finds debris that is not asbestos?

Response: The technicians are looking for indicators of all types of environmental contamination, specifically those for which there was historical use at LAFB. The inspector will notify the Oversight coordinator, and LAC will follow the Response Matrix provided in Section VII, Soils Management Plan, Table 7-1.

Comment - Table 1 – Proposed LSAL - Some of the draft LSALs have been set at 0 mg/kg. You might want to change these to more appropriate levels.

Response: The table has been revised.

V. Comments Submitted to RAB April 19, 2006 By Christine O'Connor, member Restoration Advisory Board

First General Comment - I attempted to make these comments at the hearing on the Transition Plan, which was held in March of 2006. Because I do not know if they were recorded as objections, I am submitting this written objection to the adoption of the Transition Plan II.

Response: A transcript was made of the Transition Plan public meeting and it is included in the Administrative Record. The comments made at the meeting were incorporated into the revisions to the document.

Second General Comment - There is too close a connection between the cleanup schedule and the economic interest of LERA and its successors. *Remediation should not be done to "help meet LERA development schedules," but to protect public health.*

Response: As discussed at subsequent RAB meetings, in general, the BRAC process does incorporate redevelopment priorities and environmental remediation. With the privatization, CDPHE is the lead regulator at the site. Its main goal is protection of human health and the environment. CDPHE representatives have stated publicly that it does not in any way feel like it's compromising its position in working with the LERA.

Third General Comment - *Proposed changes in Lowry's reuse plan should not be made in the Transition Plan. The same applies to proposed monitoring changes for the OU2 parcel and future land use changes to the OU2 parcel (the landfill).*

Response: The Transition Plan is not a decision making document under the RCRA. It provides an outline and layout of the plan for investigation and remediation, and set milestones and schedules for the work under the privatization agreements.

VI. Specific comments re: OU2, landfill parcel

1) The monitoring on the landfill parcel which took place March 2004, June 2004, October 2004 and February 2005 can not be considered "long-term" monitoring or form the basis decision regarding future monitoring.

Response: The monitoring for radiological parameters was performed as an assessment for determining what the 30-year monitoring program will be. It is a common practice to collect data during four quarters, representing the seasons and variable flow conditions when doing such assessments.

2) What monitoring for methane gases and other contaminants was performed between February 2005 and February 2006? What were the results?

Response: Due to the delay in receiving an approval of the landfill closure, no post-closure monitoring has been performed. The Landfill Closure Report was submitted by LAC in March 2005, and is currently under reviewed by CDPHE. On July 27, 2005, LAC submitted a letter to CDPHE confirming compliance with its obligations under the Consent Agreement pending review of this document. Post-closure monitoring will begin once it has been approved.

3) Language at page 2-6 of draft Transition Plan II states that for "future post-closure groundwater monitoring at OU2, Cabrera recommended a simplified trending protocol consisting of Gross Alpha and Gross Beta analysis as surrogate indicators. These indicators will provide sufficient understanding of dissolved uranium concentrations in groundwater at OU2." *The Transition Plan is not the place for altering monitoring systems, and this language should be removed.*

Response: CDPHE is still in the process of reviewing the results of this document and has requested discussions with LAC and the Air Force. No final decision has been made on what will be included in the post-closure radiological monitoring of the landfill.

4) Full scale monitoring should be resumed immediately, for all solvents, gases, metals and contaminants.

Response: As noted in the response above, the Landfill Closure Report is currently under review by CDPHE. Post-closure monitoring will begin once it has been approved.

5) Monitoring should be extended into the wetlands, and areas surrounding the landfill, not limited to wells placed directly on the landfill/wetlands border. Monitoring of deeper aquifers under the landfill should be discussed. I understand that withdrawing water from the first aquifer is prohibited, but believe that withdrawing water from any aquifer under and in proximity to the landfill should be prohibited until further long-term testing is performed.

Response: Extensive groundwater investigations were performed as part of OU5, including monitoring in the landfill area. The post-closure monitoring program is based on these earlier studies and current regulations for closed solid waste units.

6) Exhibit 2 of the Transition Plan is a State Environmental Covenant just signed Jan. 4, 2006 and recorded Jan. 18, 20006. It places severe restrictions on the Landfill Parcel. However, on Jan. 19, 2006, this landfill parcel was transferred to IRG and the draft Transition Plan II announces that IRG may seek to change the land use from Open Space to mixed use, in contradiction to Lowry's Reuse Plan, the Closure Documents and the Environmental Restrictions in the FOSET and in the Covenant. *The Transition Plan is not the proper vehicle for announcing change of use plans for the landfill parcel, and this language regarding IRG's intentions should be stricken. Verbal representations for the past decade, as well as the closure plan for the landfill, make it very clear that passive use will continue for 30 years, at which time its use can be evaluated.*

Response: Under the current closure plans, development of the landfill is prohibited and there are specific use restrictions on this property for the foreseeable future. The environmental

restrictions for the landfill (OU2) are identified in deed and environmental covenants recorded on this parcel. In order to make such changes to the land use, there would need to be significant review by CDPHE, and modification of the deed and environmental covenants. All parties recognize that any modification to the environmental covenants will need to be done in accordance with Federal, State and local laws and regulations, including public comments, and in a manner that is protective of human health and the environment.

VII. Specific comments with respect to Section II.B (Operable Unit 5) of the Plan

1) The public must be given a chance to understand that LERA is selling parcels overlying TCE and is going to sanction development of homes on these parcels. The remedy of ventilation systems has been used historically in situations where homes were already built and then problems developed (i.e. to remedy a bad situation). But that does not mean LERA should permit building EVEN WITH VENTILATION SYSTEMS to take place near or over the TCE plumes. With the realms of current research regarding health problems at other bases, along with the potential health problems in the area immediately to the north of the base, it would be foolish to barge ahead at such an early stage of remediation and announce to builders and buyers that the problem is covered. EVEN IF it is "disclosed" in sales documents, it is opening up LERA and builders to potential lawsuits. Disclosures are made if there is a possibility that a contaminant **might** exist. Disclosures are not intended to remove liability when a known contaminant **does** exist.

Response: The information concerning OU5 has been removed from the document, because this Transition Plan only addresses the proposed work under Privatization 2: however, in the property transfer process, CDPHE approved the transfer of the property over the plume with a covenant requiring the installation of subslab ventilation systems. The systems, identical to those used to mitigate radon gas, create a negative pressure beneath the slab and prevent vapors from migrating into the basement or lowest level.

2) The entire Section II of the Draft Transition Plan II describes in great detail all the investigative and remedial work relating to OU5 – Sitewide Groundwater. It is worth noting that the remedial descriptions regarding the TCE plumes indicate that treatment of TCE is very recent (began with KmnO4 treatment in late 2004, and *that data assessing the impact of these injections is not available in some locations, shows decrease of TCE levels in other locations, indicates rebound in other areas, and was not effective in some bedrock areas.* In other words, these feasibility studies are extremely preliminary, and do not support a decision to continue with development at this point. In addition, there is other outstanding groundwater data that the State is requesting at this time. To proceed with building on these areas of concern is not warranted at this point.

Response: The information concerning OU5 has been removed from the document, because this Transition Plan only addresses the proposed work under Privatization 2: however, the remediation of TCE in the groundwater is progressing in accordance with the Corrective Action

Plan, approved by CDPHE. Results from the first round of groundwater treatment show that, on average, there has been a 50% reduction of the TCE mass in the groundwater. As expected, the results are variable based on site-specific conditions.

3) Lastly, if LERA wants to proceed with building on contaminated sites, the disclosures to potential buyers must be of the kind that are placed on cigarette wrappers: WARNING: The Environmental Protection Agency and the Colorado Department of Health have determined that the existence of TCE and other solvents may be hazardous to your health or the health of your unborn children. The levels of solvents such as TCE which are present in soil under or near your property have been determined to be at levels that are unsafe, and these levels may be reduced by proper use of air ventilation systems, but can never be completely eliminated.

Response: The information concerning OU5 has been removed from the document, because this Transition Plan only addresses the proposed work under Privatization 2. LAC is responsible for execution of the remedial scope, and redevelopment issues fall within the purview of LERA and its buyers.

PUBLIC MEETING FOR

DRAFT TRANSITION PLAN II AND SOILS MANAGEMENT PLAN

HOSTED BY LOWRY ASSUMPTION, LLC

March 15, 2006

A public meeting was held at the office of the Air Force Real Property Agency, 765 North Uinta Way, Denver, Colorado 80230, to present plans for the second phase of the privatized cleanup at Lowry. The meeting commenced at 5:30 p.m. on March 15, 2006, before Susan G. Schneider, Shorthand Reporter and Notary Public within Colorado.

Presenters:

Joe Aiken, Lowry Assumption Corporation
Ann Wei, Lowry Assumption Corporation
Sheila Gaston, Colorado Department of Health and Environment
Elizabeth Sopher, Lowry Assumption Corporation

WHEREUPON, the within proceedings were taken:

* * * * *

MR. AIKEN: My name is Joe Aiken. I'm with Lowry Assumption Corporation. We're here tonight to talk about the transition plan for Lowry 2. We had meetings several years back about the transition plan for Lowry 1, which was privatization of groundwater and privatization of closure of Operable Unit 2, which was the landfill. And those have been under way, and those projects are ongoing and I might mention a little bit about them here. But this is Privatization 2.

At the time we did Privatization 1, the Air Force decided to retain some conditions. And at the end of December we did the Privatization 2, and all the remaining Air Force responsibilities out here, but for a few minor things, were transferred to Lowry Assumption Corporation. And we're going to talk about that tonight.

Outline of presentation is that we'll go through a little bit of introduction and background. This kind of mirrors what's in the document, and really what we want to do is kind of present it. The document is available for viewing over at the LRA. Some people have gotten copies from us to look at, but basically we want to kind of mirror the document.

So we talk a little bit about the nature and extent of environmental impacts here, a description of the anticipated future use of the properties, a little bit about the cleanup process, which we call the corrective action process, identification of institutional controls. And what institutional controls are is that some of the properties out here come with restrictions, like you can't drill a well into the groundwater because there's a groundwater issue. Minor detail, because you couldn't put a well in Denver, anyway, but there's a restriction on putting wells into the groundwater and a number of other restrictions.

I want to talk mostly about the soils management plan, because the deal we did here and what we did is fairly unprecedented, because Privatization 2 not only considers the known issues that are things that we know have to be cleaned up, but also covers the unknowns. So when construction starts out here, and quite a bit of construction has started since we did the privatization, we have observers looking in holes, and whatever we find we will deal with. So we'll deal with whatever is found, any new discoveries, plus what was historically here and we know about.

I'll give you a little bit about some plan

schedules and key activities and then open it up for questions. This is actually interesting, because there's a lot of new faces in this crowd, so that's a good thing for a public meeting. So I'm going to go through a little bit of background on the site.

From 1983 to 1994 -- and this is an environmental background -- the Air Force performed a number of site assessments. In the early '80s, really, the environmental movement came in. People started looking at facilities. There's a law called the Resource Conservation and Recovery Act, RCRA, and that law basically guides how you look at a facility and look at waste handling and look at waste disposal.

And so under RCRA and under the state guidance, the Air Force began looking at facilities out here. They started looking at how do we deal with our underground tanks? How do we deal with our waste handling and disposal? What do we do when we have a spill? So all those things, the Air Force started picking up on that.

And in 1994, the reason it ends there is because in 1994 they announced that the base was going to close. And under a different law, the Base Realignment and Closure Act of 1988 -- under that act the handling of environmental conditions at the site

were done under what's called a CERCLA-like process. CERCLA is the Superfund law. I won't even go there, comprehensive blah, blah, blah. It's a big law, but it's basically Superfund. And under that process, again, there's guidelines of how do you look for waste, how do you deal with it, what do they call the investigations. There's a whole series of guidelines.

And the Air Force, under that law, under BRAC, which is the Base Realignment and Closure Act, started closing the base out and closing environmental issues at the base out. And what you have under BRAC is that the Air Force is the lead agency. The Air Force regulates themselves, basically, under BRAC, and they have what's called the Base Cleanup Team, the BCT, which existed of the State and EPA and the Air Force. So any decisions that were made were kind of made with the three, but the Air Force had the ultimate decision.

In 1995 to 2001 they performed what's called the Remedial Investigation/Feasibility Study out here, and this was a huge investigation. They put thousands of borings in the ground. That took thousands of samples to really understand the conditions that you find out here. In terms of how much can anybody ever understand a site, well, they really identified locations where waste might have been handled. They

Page 6

sampled around those. They closed some units. They cleaned up underground tanks.

The Auto Hobby Shop, for example, was found to have released hydrocarbons and solvents, and they cleaned up the Auto Hobby Shop. Basically what happened was there was a series of closures of different waste units and looking at groundwater and trying to determine what the issues were.

That RI/FS process is, by design, a slow process, and the Air Force was moving through it. In the meantime, the LRA was out here trying to develop this property, and the LRA developed largely almost all the property that it could during that time frame that wasn't contaminated or was impacted by environmental.

On this map you can see that the western portion of the base has really been developed out, almost completely developed. Right now they're doing some infill developments. There were really no environmental impacts that were known at the time in this area, except for you see some properties that were held out. Parcel 3 here has a groundwater plume underneath it, so that property is shown, even though the development proceeded on top of that, because it's a commercial area. Really, the LRA was developing areas that could be developed.

Page 7

The rest of this green is areas that are environmentally impacted, mainly from a groundwater plume, but there's also some asbestos in soils and there's an outdoor firing range. There was a fire training zone where activities that went on by the Air Force left residual contamination in soil or groundwater. And while these issues were being dealt with by the Air Force, the LRA really couldn't proceed with developments.

MS. SOPHER: That's the light green.

MR. AIKEN: On here the light green is areas that are environmentally impacted, and the dark green is areas that are considered not environmentally impacted.

So the LRA basically approached my company, and we basically worked out Privatization 1, which was to take the responsibility for the groundwater cleanup and for several other items, including closure of the landfill, which is shown here. This parcel 2 is an old landfill. We took that on in what's known as a privatization, so the Air Force no longer was responsible for that. They paid us for it. We got an insurance policy to make sure that there was enough money in place to get the whole entire deal done, and we've been actively remediating these things and making

Page 8

good progress on cleaning that up over the years.

Later in 2003 the Air Force approached us and said, can we privatize everything else out here, because there were still some things holding up the property transfers. So we entered into an arrangement where we did the privatization as well as the property transfer for all the properties.

So we prepared what's called a FOSET, or a finding of suitability for early transfer, for the light green properties, and a FOST, which is a finding of suitability for transfer, for the dark green properties. We got those approved and all the property transferred to the LRA, along with privatization all the remaining environmental responsibilities out here, so we're now starting the process of completing the rest of the cleanup out here at Lowry.

The transitional document is all based on a consent agreement, one of the keys to how does the Air Force lose their liability? Well, we did a consent agreement with the State of Colorado. Under the consent agreement, the State of Colorado becomes the lead agency. Remember, I said the Air Force was regulating themselves. Now we're regulated by Colorado, which actually significantly -- not that these guys argued, but they couldn't see eye to eye

Page 9

occasionally. And sometimes we would slow the process down, because they couldn't see eye to eye. Now the State's in charge, and under the consent agreement we pretty much do what the State wants us to do, by design.

Within 60 days we had to prepare a draft transition plan, which we did, and we submitted it. And the transition plan -- I want to explain what this is, because that's what this meeting is about -- is a project management tool, and it's designed to ensure efficient transition from the federal process to a streamlined state process.

So the consent agreement defines the process we're going to follow. And you're coming out of this big CERCLA process, and the best way to describe this is if you looked at the Administrative Record, which is the library where all the books are on what's been done in the past, when the Air Force would write a document, it would be about this fat, and when we write a document, it's about this fat. And it's just because we were able to streamline the process with the State, and we still have the facts and the information necessary to show that things are protective of human health and the environment, but it's a little faster and streamlined.

Page 10

The transition plan is nothing more than a project planning tool. There's no decisions made in it. It's not a document that is written in stone, and as a matter of fact, everything that's in this document is pretty much written in some other document, like the FOSET or the RI or the RFA, the RCRA Facility Assessment, which was another large report done out here. Everything is in those documents. But it does give us an opportunity to summarize what we know and what we don't know about the site, so we have a summary of that.

It's a communication tool to ensure that we're all on the same page. There's multiple parties involved in this, and there's stakeholders and citizens to make sure we're all on the same page. It's a tool that generates some discussion. Tonight's meeting is to get some discussion going and to hear what people think, and it gives us a framework to actually achieve our consent agreement requirements.

Now, I know there's a lot of new faces and it's really hard to pick up on all the stuff that's happened here, but it's equally hard for me in this little time to compress 15 years of investigations and remediations and all kinds of things that have happened out here. But there's really been quite a large effort

Page 11

to find what's here at Lowry and to deal with it over the years.

The Air Force felt that they had done a good job with that. A couple of years ago the State wasn't happy with how the Air Force was doing it, and they ordered the Air Force to redo the RCRA Facility Assessment. And what they did is they spent millions of dollars basically going back and looking at every facility, going back and looking at the drawings, interviewing people, trying to compile what could have been spilled, what could have been done. Where are the problems? Have we dealt with those problems?

And the RCRA Facility Assessment, short of the State saying yes on it, it's pretty well down the road. It's been completed. It was submitted by the Air Force a year ago January. Basically, what the results of the RFA were is that there are about 14 smaller types of areas where there were some questions about groundwater. And we're in the process of moving into an investigation to look at those areas and maybe about 20, 25 buildings where there may have been, like, a chemical lab or a PCB transformer that haven't been looked at in the past, and we're going to go back and look at those.

But nothing really large scale came out of

Page 12

this, because remedial investigation did a good job of finding the large things. So we've got a few data gaps that are pending, and that's part of our program is to close those up.

Lowry 1 was the groundwater, so the groundwater issues are being looked at under Privatization 1, and the soil issues are being looked at under 2. There's also an additional -- if you really are interested, we had a meeting probably six months ago, or five months ago, on the FOSET, finding of suitability for early transfer. And, really, for the FOSET, in order to transfer these properties, you have to give a very detailed description of what the issues are and what the environmental problems are, so we went through that in the FOSET. So there's a number of resources, if you're really interested, that you can go to and find out about these things.

But we have a bunch of known environmental conditions, so what are those? We have Operable Unit 2, which is the landfill, and, pretty much, Operable Unit 2 has been closed. We have a closure document pending. There's a few minor details. We're getting into postclosure monitoring on it. It's pretty close to the end of that process.

We have a basewide groundwater issue.

Page 13

There's a groundwater plume. You can see it's this light green. This groundwater plume goes off the base, and it goes all the way to Stapleton Airport. And it's under control. We've been treating it for years. We put about 850 chemical injections. We injected oxidant into the groundwater, and we got about a 50 percent mass reduction. We recently did another round of groundwater sampling, and 50 percent, more or less, sticks. We are now planning on the next layer of injection. And, basically, to clean the groundwater there's going to be a series of injections. But the groundwater's pretty well under control.

There's also a groundwater plume here that pretty much ends right off the base here, and then you can see a couple of circular-looking globs over in the golf course area. There's a number of little plumes over there. Not very high concentrations but, nonetheless, we're addressing those. The major one is, though, the main plume, and there's two source areas, one back here and the one that was located over in this location.

Building 606 is this small -- you actually can you see it across the parking lot there. It's a small area where there was an underground tank. The Air Force did a cleanup. Subsequent sampling showed

Page 14

that the cleanup didn't get everything. There was still contamination of groundwater. We picked that up. We were over there today injecting an oxygen release compound to effect the treatment over there.

The outdoor firing range is located in the corner here. You can see a trapezoidal type of property there, and if you drive up and down, it's where those big walls are. It's the old firing range for the base. Obviously, they fired bullets that had lead in them. There's lead in the soils. There's some lead cleanup that has to be going on out there.

We are actually in the process today of initiating treatment out there. We've already gone through and done a clearance for what they call MEC clearance, munitions and explosives clearance. We've gone through that process, and now we are looking at picking up the dirt, treating it, mixing it, basically making cement-like material out of it. It stabilizes the lead, and we can dispose of it off-site.

The fire training zone over on the golf course, if you've ridden by there lately, you might have seen a couple of little snow fences. There were some areas where the Air Force did fire training, so they had a couple of old airplanes over there, and they would throw solvents on them or throw gasoline on them

Page 15

and light them up. And then the guys would rush in and put the fires out and learn how to put an airplane fire out. Well, that left residual contamination in the soil. It was investigated by the Air Force, and we actually are just about complete in those areas just right out here in the outdoor firing range.

Building 898 was a dental clinic. It's located over here. When the Air Force did their investigation, they found some mercury underneath the drain, so we're going to go back in there and look at the facility to see if we can determine if the mercury has spread and clean that up, and then we're going to demolish the building and take it down. And that building has asbestos-containing materials in it, like the rest of the buildings out here, so we'll deal with that appropriately.

There were two big water supply wells, one located here and one located here. And one of the things we committed to everybody, we committed to the RAB, which is the Restoration Advisory Board, we committed to the LRA, that once we got this whole thing done with the Air Force, that we would hit the ground running. Well, we're actually done closing those wells out. We put a plan in front of Sheila. Sheila approved it in a most expeditious manner. We went to

Page 16

the field and closed those areas out.

And you see this little red dot, which is kind of interesting, because all the white here has already been transferred. The dark green was transferred under a FOST, which I said was the clean transfer. The light green was transferred as a dirty transfer. And the only properties that weren't transferred out here was this little tiny space, and this is DFAS. DFAS is still occupying that facility. Air Force still owns the property, and they operate their accounting services out of here.

Well, this property didn't get transferred, because during the RFA it came out as an RFA unknown, so it was a suspect location, and it didn't qualify as a clean transfer or a dirty transfer. It couldn't qualify as a dirty transfer, because we just didn't know whether it was dirty or not, so we left it out.

We went in, and the first thing we did was investigate it once the deal was done. We, again, put a work plan in front of Sheila. We've investigated it. It wasn't really a very big area, maybe a little bigger than this whole room, but it was a potential waste area where the Air Force might have placed waste from old aerial photographs. We investigated it, found nothing. Sheila has basically said, fine, the data

Page 17

looks good, and we're good to develop that area. So we'll now proceed with the Air Force to finalize the transfer of that property. But I was told today, it's not the smallest property transfer that ever occurred out here.

Asbestos in the Northwest Neighborhood, which is something a lot of people are interested in, because years ago they found asbestos in the Northwest Neighborhood while they were constructing, while people were moving in, moved in. It was a very contentious situation, and the State issued a compliance advisory ordering the builders to clean it up. And everybody went in there and did their cleanup.

And what was left over from the compliance advisory is this green area. You can see this dotted line here, so everything basically west of Uinta in this parcel. And we are responsible for doing that cleanup. We're in the process of getting proposals from people to do the job for us. And those are the knowns.

We also addressed unknowns through a soils management program, and we're going to talk a little bit more about this later, but I'll just briefly introduce the soils management program. There's really two ways of discovering something when you're doing an

Page 18

environmental cleanup and investigation. One is to go out and put a boring down next to a building where an activity occurred that you think might have caused a problem and find something, right, with your boring or not find it.

The other way to do it is to start a construction project and say, I'm going to put a 24-inch water line, a gray water line, from the city wastewater plant that runs all the way across the base over to the golf course, and that line is going to deliver irrigation water, tertiary treated water, to the golf course.

So suppose I want to do that. Well, what's the chances we're going to find something when we dig that trench? The hole is going to be 9 feet deep. They've been digging it on Uinta here, if you noticed. The hole is at about 9 to 12 feet deep, 5 or 6 feet wide. It's a pretty big sample of the base. They're cutting a trench right down the middle of the base. So far we really haven't found too much along it, so that's a good thing, but it's still only about a third done, and it's going to continue across there.

So how would we deal with something like that? And you could go in an investigate the whole thing, but when you're putting small little holes in

Page 19

the ground, you can easily miss something. So what we do is we put a trained person out there, an observer, who stands next to the hole and watches the dirt as it comes out and says, hey, that dirt's clean. And they record every day that they saw the dirt and it was clean. Every time that the construction guys are out there, our guys are out there.

And we have oversight, and we're running through a soils management program as part of the transition plan. So by using that process, the discoveries that occur during excavations and construction activities are covered, also, by this privatization.

Anticipated future use, the transition plan also goes in and talks about anticipated future use of various properties out here. And, really, the light green properties, they talk about. So parcel 1 is the east portion of the Northwest Neighborhood I talked about, and pretty much that's slated for residential.

Operable Unit 2 is the landfill zone, and the landfill zone is currently slated for open space, but that doesn't mean that can't change in the future, and the transition plan says that that might change in the future. And it might change to a mixed use is what it says, but what happens under that process is, if you

Page 20

want to change to a mixed use, you have to go through and get City approval, State approval. There's a whole bunch of approvals that have to go. This isn't a decision that's being made as much as a notification that this might happen in the future. When it does happen, there's going to be a lengthy process that I'm sure everybody's going to be pretty interested in what happens out there.

Parcel 3 is the Town Center, and this is already pretty well built out. They're building that last brew pub over there, which I'm happy about, and we'll have another spot to go. But, pretty much, that's all built out. And parcel 3, the main impact from an environmental standpoint is the groundwater plume that's fairly deep, 40 feet down. It's under treatment. It doesn't mean, when you have an environmental impact like a groundwater issue, that you cannot build. It just means that you might have to build with some restrictions.

Parcel No. 4 is what's called Lowry East now. We call it the main TCE plume, but Lowry East is really -- actually, parcel 4 is this whole thing, so let me talk about the Lowry East portion of it. This is all going to be developed. There's a fairly sizable residential development going in here. Right now

Page 21

they're grading and putting in roadways and utilities. But you notice there's a groundwater plume, and you notice that the fire training zone is there. The deed restrictions that we have here say you cannot build unless you clean the outdoor firing range up, and we will get that approved by the State before anybody can build out there.

We're in the middle of treating the groundwater in here, and while we've had some good success, one of the institutional controls that were placed on this site is that if you are going to build over a plume, you have to have an indoor air system that basically collects vapors from your basement and blows them to the outside. Probably a good idea to have something like that anyway, because we live in Colorado and there's radon. So you're really putting a radon system into those homes, but now it's a must. It's a restriction that if you build, you have to have a system in place.

Parcel 5 is the fire training zone, and that's right now slated as golf course.

Parcel 6 is this little 606, and once 606 is cleared you're going to have another one of these units that are right out here. These multiple family homes here will be placed on that last lot in that

Page 22

development.
And then Building 898 is basically slated as park. It's currently a park, and that's where the community garden is up there. And they're just going to knock the building down, and it will continue to be the community garden.
The corrective action process -- again, I'm following the outline of the transition plan itself. I wanted to talk a little bit about the corrective action process, because if you're interested, first of all, our known projects are done in a similar approach to the way all projects out here are done.
We have an approved work plan from Sheila for anything we do from the State of Colorado. We go out and do the field implementation, collect samples that prove that we've got the thing cleaned up, put the results of that into a closure report, and the closure report gets either approved or disapproved by the State of Colorado. If it's disapproved, we go out and clean it back up. If it's approved, then we are done with the project. So they really are operating under the management of CDPHE for the cleanup that's a part of the corrective action process.
The discoveries -- and I mentioned that we expect to find things as we develop out here. You

Page 23

can't find everything through a remedial investigation, so we expect to find things, but that's managed through our soils management plan and field oversight, which, again, I'm going to talk a little bit more about.
The transition plan presents summary scopes for some proposed remedial actions, some investigations, corrective actions and some other things, so if you are interested in what are we going to do at the outdoor firing range, you can go into the transition plan and find a summary of what we plan on doing at the outdoor firing range. And all of the different projects I've talked about here, there's a summary in the plan for those.
Identification of institutional controls -- did you want to say anything more than what I already said?
MS. WEI: It's up to you. My name is Ann Wei. I'm an attorney and the legal advisor, basically, to LAC, and I worked pretty intimately with all the different documents that went on the past two years for the privatization, for Privatization 1 and 2, and for the property transfers that occurred out here.
What happened, as far as institutional controls, this is for the light green areas we're talking about, with that, there's three ways among the

Page 24

Air Force and the LRA and the State, they put different environmental controls on those properties in order to protect human health and the environment while we are out there remediating.
So one place where there are restrictions are the deeds currently from the Air Force to the LRA. So if you're buying property out here, you'll probably see a whole bunch of deed notices. They'll have notices on asbestos-containing materials. They have notices on lead-based paint, the wetlands, items like that.
The consent agreement that LAC and the LRA entered into with the State also has a provision in there, and it's paragraph 101, that there are certain areas on this base that are primarily soil-related issues, such as the outdoor firing range, the fire training zone, where the LRA needs to either achieve the no further action notice of completion prior to transfer or go to the department for written permission if they're going to transfer prior to us completing our remedial work. So the State's involved in making sure that the people who get that property are protected while we're completing our remedial actions on those sites.
The third one up there, there's a state environmental covenant statute that went into effect in

Page 25

July 2001. There's probably close to maybe 15 sites now, Sheila? -- I'm not sure -- that now have state environmental covenants on them, and this is one site. We have three covenants. Two are granted by the Air Force, one for the groundwater, one for the landfill, and then the third covenant was granted by the LRA for the fire training zone, and those currently went of record in January with the rest of the reporting of the deeds of the property transfers out here. So they're all of public record, and I think there are copies of them in the transition plan. If you want them, let us know. I have them electronically.
MR. AIKEN: And the covenant is something that can be removed. It's actually recorded with the deed, and when we have a cleanup, we can ask to have the covenant removed. And, actually, that's our ultimate goal is to achieve cleanup to the point where we can get covenants removed and turn this base back to clean use.
And by the way, I should have introduced Ann, because all the documents necessary to get this kind of job done are amazing, and the process -- I would be insane if I did what Ann does. That's why we work as a good team. But Ann's really responsible for putting together the FOSET and a lot of the documents and

Page 26

really has worked well with the Air Force and the State and is largely responsible for getting this thing done. So thank you, Ann.

The soils management plan is something I want to focus on a little bit, because I personally think this is the best part of the whole entire process. It's the most important part of the process, and what it's designed to do is to presume we're going to find something, think about what we're going to find ahead of time, and create an approved plan of how do we deal with it?

So let's say I'm digging that line across the base, and I come upon an underground tank in oily soils. Well, we don't want to have the whole process stopped, and then the contractor who's digging the line has to stop. We want a plan in place that says, okay, if we find that, we come right out there, we take the tank out of the ground, remove the soils, we grab some samples. We step aside. We let the contractor move through, and now we've basically facilitated the redevelopment of this base while we're dealing with the environmental, as opposed to having the environmental slow the development down.

And the State is very much behind this, and we do it through a soils management plan, which is a

Page 27

series of processes by which we decide how we're going to deal with stuff. It lays out roles and responsibilities, and the key role here is oversight. And LAC is responsible for oversight, and we've had, I would say, at least ten to thirteen people every day since we started this deal out here looking at holes that are being dug.

And what kind of holes are these? If you're digging the foundation of a house, we have someone watching. If they're digging that line, we have someone watching. When they were doing the grading -- and they still are doing these things -- in Lowry East, they've got huge earth-moving machines running around, and we have four or five people on the ground in that location walking behind the machine. So as it rips up some earth, they're looking at the materials and saying, Is this clean dirt? Is it a natural material? Do I find anything that would be of concern, any asbestos, any oily looking soil, any kind of waste?

So we have people out here looking every day, documenting that, and eventually what we will do is have a big map that shows any place where there has been excavation activities, either that we found something and cleaned it up or that nothing was found. So we'll basically create a record to say we've also

Page 28

looked and investigated. And think of it as a gigantic sampling of the base, because you're digging holes everywhere.

Now, the soils management plan identifies certain contaminants of concern. I would say these are the usual suspects, and they're pretty much a broad list of things like petroleum products, lead that we might find from a firing range or lead-based paint, asbestos, you name it. There's a series of chemicals called volatiles that are used in solvents. Those are on the list. So we have a pretty lengthy list of contaminants of concern.

We have protocol for handling any discoveries written in the soils management plan. We have proposed Lowry soil action levels, which is, when this is approved, the State will approve these action levels that says, if I find petroleum -- suppose I find gasoline and it has benzene in it. Well, if I take the soil out and take a sample and it's below my action level, I'm done. And I don't really have to do much more but report to the State that this is what we did and here's how we took the samples, and I will send a report after the fact.

Now, the State can come back and say, I don't think you sampled properly. Go back and look at it.

Page 29

So it's inherent upon us to do our job properly so that the State approves what we're doing, but, again, it's a process of moving the project forward, dealing with the discoveries as they're found.

And we have a response matrix in this that says if we found a cartridge or a shell from a weapon, what do you do? If you found an underground tank, what do you do? So there's a whole series of responses that are already approved and thought about so that we would move according to that plan, and as long as we did it according to plan, we'd be in good shape.

And it also outlines our requirements to achieve closure. So if we did find an underground tank, we want to close that unit out, so what do we have to do and how many samples would be appropriate, and all that stuff is in the plan.

It also lays out an annual training program that we are putting together, and the annual training program is in response to an issue that came up as we were negotiating this as to how about you guys are out here digging, you guys are out here looking in holes, but the City and County of Denver decides to show up and do some maintenance on a sewer line on a street that they own.

City and County of Denver may not feel it's

Page 30

necessary to tell anybody that they're going to go fix their sewer line, and they show up and the workers are now potentially exposed to something. Now, we have people who ride around the base on a regular basis, and we typically find people who are digging holes in the ground, because they know who's digging, and will ride by and go, What is that guy doing? And we'll go over and talk to him and make sure that they have the proper oversight.

But what we agreed to do is to take people from the City and County, people from Qwest, we'll broadly advertise, and we'll have a training program by which we bring in the people and explain to them, why is Lowry special, what do you have to do when you're digging in Lowry? Who should you call? What does the soils management plan require you to do, and try to educate people who are responsible for digging these things on an annual basis for the next ten years so that we can avoid having a situation where someone's digging in an area that they're not supposed to be.

Planned schedule of key activities, I can't put the whole schedule up here, so I summarized a few activities. And, actually, one of Sheila's main comments to our transition plan is that she wants a tougher schedule so she can hold us to it. So we're

Page 31

going to sit down and work out the schedule with Sheila to make sure we've outlined what it is we're planning on doing and when.

And the main reason for that is that the consent agreement is written around milestones and stipulated penalties, so that if I didn't perform, the State can fine us. So I have to first not meet a milestone in order to be fined, so we'll set up the milestones and get that rolling.

But here's some of the key activities. The outdoor firing range, the fire training zone, the supply wells, Building 606 and PAA 2 are all lumped together, because those are projects that we've already started. We are working on them in the first quarter of 2006. They will all be done by the end of the second quarter. They're all being worked on. We expect that we will get them done. We will prepare reports and go through the closure process on those later this year, but we've really moved on those. Again, that's something we committed to do.

Oversight of excavation activities, that's an ongoing thing for the next ten years. We'll be out there looking at any hole that's dug in the ground.

The RFA data gaps for groundwater, Chris Miller is with MACTEC. He's our contractor for the

Page 32

groundwater. MACTEC has written a work plan for the data gaps investigation. It's been approved by CDPHE, and they're generally ready to get out in the field and get getting on looking at the data gaps for groundwater.

The RFA data gaps, second quarter, I'm anticipating about May that I'll have a work plan for that. And the reason that's pushed out a little bit is two good reasons. Sheila really needs to finalize her approval of the RFA work plan before we can finish this. And, secondly, when we actually started this project, there were so many priorities for the LRA, because we wanted to get out here and do a good job and get out of the LRA's way. There were so many priorities that we actually had to push something off a little bit, so data gaps will be looked at.

Again, the data gaps that we're talking about aren't very large things. There's 16 PCB locations, for example, where there was a PCB transformer behind a building, and usually these are small transformers for the building. Nobody looked to see if the pad was dirty or if there was any soil contamination around it. We don't expect them to be very extensive, because PCBs, if they did spill them, don't go very far in the environment, so you might find some soils. It's more

Page 33

that kind of thing. It's kind of a cleanup or a mop-up of some last issues.

Asbestos in the Northwest Neighborhood, first and second quarters, we've actually initiated some of this work, but, really, the heavy portion of it and the approvals for our work plan will happen here in the second quarter. We anticipate being in the field in April-May here to start doing the sampling. We're going to end up taking somewhere -- well, there's a lot of samples. Our current number is about 3600, but we've got to finalize the work plan as to how many samples we collect in this area, and then we'll come in and clean the soils up based on the results of the sampling.

And then, when they dig the foundations, we'll actually look in the foundations to see if there's any additional asbestos that we didn't catch through the sampling program. So there's actually several layers of protection involved in that, but that's going to be ongoing.

And then groundwater treatment is ongoing. We anticipate another round of injections around June or July of this year. And, again, those injections are happening throughout the body of this plume all the way up to Stapleton. And through these plumes, we did 860

Page 34

injections. We're yet to figure out how many more, but it's probably going to look similar to the first round as to what we do out there to try and move that groundwater along.

In summary, the transition plan summarizes site conditions and the controls that are in place out here. It presents the proposed actions that we are going to do to achieve no further action. Again, our goal is to get to closure, to clean the place up and document some of our procedures and processes.

So with that, I can open it up and see if there's any questions.

MS. O'CONNOR: I didn't get to the soils plan part, because I got stuck on some other things, but is the soils management plan that you just described applicable only to things seen by the naked eye, or are there some random sifting and sampling, i.e., for asbestos? Because you're fairly close to Uinta for some of this digging, so I would like to know if there's any sampling, or is it just dependent on observing?

MR. AIKEN: It's visual, olfactory. You would be able to smell certain things. Like if there was benzene or gasoline in the ground, you would smell it. So the observers are using their faculties to look

Page 35

at the ground and see it.

Asbestos, we don't basically see or look for something that's microscopic, mainly because you're not required to do that in Colorado. There's a protocol in the state that says it starts at finding a visual find of asbestos, and then you move down a series of actions that occur.

MS. GASTON: I might add to that, if you're going to find a disposal area for asbestos, it's basically going to be construction debris. You're going to find a place where somebody has torn down a building and then thrown the debris into a hole, and in that debris will be asbestos. So you're going to see other indications that there's a problem there, and if they see debris, then they stop and look closer at it and do some sampling to make sure there's not asbestos associated with it.

MR. AIKEN: In the Northwest Neighborhood, because there were people living there, the State really was compelled to go out there and do a lot of sampling to make sure that there wasn't an issue that was causing a human health problem.

But in this area they collected 26,000 samples. Even though they collected 26,000 samples, they still found asbestos chunks when they were digging

Page 36

holes. Because asbestos is a type of material that it's actually better to do it visually than it is to do with samples, because I could have a chunk of asbestos there, and I could put a million holes in this room and miss it. But when I dig this dirt up and I've got somebody looking at it, it pops out. There it is. Okay, now we've got to take that and the surrounding dirt, and off it goes, so it's a better approach.

MS. O'CONNOR: I'm just thinking that the amount of sampling you're doing on the west side of Uinta is pretty extensive --

MR. AIKEN: Yes, it is.

MS. O'CONNOR: -- and then you're not doing any -- as far as I can tell from what you described, any random sampling anywhere else --

MR. AIKEN; Right. And that's because --

MS. O'CONNOR: -- where you're digging, even near the outdoor firing range?

MR. AIKEN: Since this happened, there was a compliance advisory put over this property, and the compliance advisory dictates how they want you to sample. And it's mainly because people were already living there, but it's kind of a legacy. Since then, the State has sat down and come up with new asbestos regulations and protocols and procedures, and the rest

Page 37

of the base will be basically done according to the State's procedures.

MS. GASTON: Also, in that area we know, historically, that west of Uinta was the old hospital complex, and that buildings were torn down and that debris left in place. That didn't occur east of Uinta. There weren't buildings there before, historically.

So we do use a lot of that history as a base to know, well, were there buildings back in the '40s and '50s that would have been demolished in this area of the base or that area of the base, and we use that to make these decisions.

MR. AIKEN: And, Chris, actually, that's a really good point, because if you went back and looked at these aerial photos, what you'd see is that during World War II they built a bunch of buildings in here, including a hospital. And around in the '50s sometime, they ripped all that stuff down, and they built up new facilities that were used for the new use of the base, because the hospital was no longer needed and the barracks up there were old from the war.

So they tore them all down, regraded the area, and they actually put a trailer park in the area where the hospital was. The LRA came and they removed the trailers, regraded the area again, and put in roads

a90d9772-6955-4604-be1c-32078b0aa328

Page 38

and built houses, or sold the property and houses started being built.

And all the activity of regrading and redoing and all that kind of stuff, it's kind of unique to this part of the base. There was some of that, actually, over in the HEAT Campus, but the HEAT Campus is not something that's part of this deal. That was excluded from the privatization. But the bottom line is that it's really this unique activity.

Now, when we went and looked at the base, I actually compared every place else on this base to this property, and I've compared it from the perspective -- and this was for underwriting purposes for my insurance policy. I compared it from how many buildings were there compared to what were in the Northwest Neighborhood. Who tore the buildings down? Because when the Air Force tore a building down -- and this isn't the bad Air Force. This is just in 1955, when you tore a building down, you knocked it over with a bulldozer and loaded as much of the stuff as you can get into a truck and then built the next building. It was just sort of the standard procedures of the day.

So I said, okay, what was the building? Was it knocked down? Who demolished it? If it was demolished by the LRA, when the LRA started doing this,

Page 39

there were procedures for doing asbestos abatement in buildings before you knocked them down. So you say, okay, if the LRA took a building down, at least there were some controls. That doesn't mean something didn't fall off a truck somewhere, but it was probably a little better controls.

So how many buildings were demolished? Are they still there? How much previous regrading was there? What kind of future activities are going to occur, so are you going to be exposed to anything that gets dug up?

And when I took all those areas, I created a risk profile for each of the different areas of this base. And that's how I actually accomplished underwriting for the unknowns, because insurance companies don't like to guarantee unknowns, but we were actually able to accomplish that by making a model out of that.

MR. KLIMUT: I don't know if this is a question for you, Joe, or Sheila, but I think it's great that you have oversight out there that's actually looking at the excavations as they're going on. What sort of quality control is there for the people that are providing the oversight? What sort of oversight is there of the people that are doing the oversight? It

Page 40

seems to me as though that's sort of a critical piece of making sure that the oversight is effective.

MR. AIKEN: Right. And Elizabeth, where did John go? We have Elizabeth Sopher and John Yerten both working for us here. These are IRG employees. This is our people who are in charge of the oversight guys.

Both Elizabeth and John have extensive backgrounds with environmental cleanups and activities. John, in particular, has a lot of field activities doing oversight and looking at holes and watching contractors do their work.

For the most part, the body of people that we're bringing in are temporary employees that we're getting out of Rocky Flats who have been doing oversight at Rocky Flats for years and years. These are some of the most highly trained -- when you work on a DOE site and you do something like oversight, these people, you read their resumes and they're trained, trained, trained. So the people are actually very good. And that doesn't mean that when they're here, we have to tell them specifically, this is asbestos-containing, this isn't.

And I'll give you a good example. When we first started, these guys were getting calls every day, We found this white material in the ground. Well, in

Page 41

the ground out here is a material called "caliche," a naturally occurring soil component. It's basically -- what is it? -- calcium carbonate or something like that. It's naturally found in the soils.

And when you dig a hole and you rip it up and there's this white powdery-looking stuff, your first reaction is, what the heck, right? Well, once you see a bunch of caliche, you know that's caliche and you know this other material is asbestos-containing. So we've been going through that kind of training with them.

These guys are to be complimented, because some days I don't know how they deal with it, because they get phone calls every five minutes. Our guys are instructed that if you find anything that you think is out of the ordinary, call us, and we'll run out there and take a look at it. So we're doing second looks on all this kind of stuff.

We also have the LRA folks who are running around doing a lot of work out here. The LRA was doing this oversight for years, and so there's a lot of trained people at the LRA. And sometimes LRA would come over and we'd say, we're going to sample this, and they'd say, well, we sampled that 15 times and it doesn't contain asbestos. And that's good, but we're

Page 42

typically going to err on the side of sampling it, because it costs 5 bucks for the sample. Send it off, get it done.

MS. GASTON: What I would add to that is that we have our air inspectors that have been involved in a lot of the Northwest Neighborhood, the asbestos clearance out there, and they're out here on projects that they need to be out on. They're also checking up and walking through a lot of the projects and overseeing what the guys are doing and making sure that they're catching things.

MR. AIKEN: And here's a good example. I came down here the other day because we had some meetings planned, and sitting in the fenced area on Filing 28, which is fenced in for the asbestos -- I'm driving down the road, and there's a guy sitting in a pickup truck inside the fence. So I do a U-turn in the 667 parking lot. And I looked at this guy, and his truck says A.G. Wassenaar, which is one of the asbestos contractors out here, and they dig foundations and they do various things. So I go, what in the heck is this guy from A.G. Wassenaar doing? So I came right back over here, and I asked the question, What is A.G. Wassenaar doing? And everybody was, like, I don't know.

Page 43

We went over to the State for our meeting, and this is literally -- takes us 15 minutes to get over to the State's office. I walk in the meeting. Jeff Edson and the asbestos inspector for the State, Bob Johannes, walk around the corner and say, What's A.G. Wassenaar doing on Filing 28? And I go, That's a good question. I saw him out there, too, and we're trying to find out.

And what it turns out is that through the loop, A.G. Wasserman was requesting to go in there and put some borings in to test for the foundations, to do some geotechnical testing for the guy who's going to build on that parcel. And the guy who wants to build on it is chomping at the bit to get out there and build his condos. Well, they were just going to put some geotechnical borings in. The state guy kicked him off the site and told him to get out of here, because he must have seen him right after I did. We find out that the LRA and the builder hadn't talked to us, they talked to Elizabeth, and Elizabeth said, Sure, you want to do this, that sounds okay, because they're an accepted contractor.

MS. SOPHER: But they were supposed to call us.

MR. AIKEN: But they were supposed to call us

Page 44

before they would go out there. They didn't call us, and it just got this whole loop.

But the moral of that story is people are watching. People are out here looking at what's going on, and we have multiple viewpoints coming in on it, so I think that's one of the best things that's going on. That's really why I wanted to spend a lot of time on it.

MR. KLIMUT: I guess the follow-up question that I would have is, Are there resources available through CDPHE, other than on the air side of things, more to look for things like other types of impacts there might be to soil, or is the asbestos really the primary concern?

MS. GASTON: That is our biggest concern. There's been so many other studies, and because of the thorough RFA that was done, historical activities, other issues we would have caught, most likely, by now. If there are large issues, they would have been caught with all the borings and the excavations. Asbestos is one of those things that is just not --

MR. KLIMUT: My fear -- and not to throw stones at your organization, but when you look at LRA, LAC, IRG, they all tend to be on the side of the equation whose primary emphasis is on the redevelopment

Page 45

of the site. And I understand that you're professionals, but there might be some temptation that without adequate oversight from CDPHE might be given into.

And the question that I have is, as the public, ought we be advocating for additional resources, for some little bit more resources just to sort of double-check every now and then on something other than the asbestos?

MR. BOLLMAN: David, we run into this issue all the time, and I'd just say, if I'm out there or one of my people are out there and sees something and does something incorrectly, they're looking at possible fines or looking at possible jail time. And I haven't met anybody in the environmental business, to date, that is willing to take that risk for the company.

Now, an owner of a company, that's a different deal, but, quite honestly, the question's asked of us all the time. Denver is doing a Superfund site out in Arapahoe County, and we're being accused of hiding data all the time. I don't know anybody that personally is going to take that risk for the City of Denver or for LAC or for IRG.

MR. KLIMUT: And you've been with the project long enough and you have a level of trust with the

Page 46

folks above and beyond just the usual --
MR. BOLLMANN: You've got to have that.
MR. AIKEN: Not to mention the fact that -- imagine this: How big of a problem could we actually hide, first of all? Suppose I hide a problem, and it's not very big, but I kick it under the carpet, and it's later discovered that I did that. Like Dennis said, I've got serious penalties potentially coming my way, but then it costs me twice as much to do everything else I've got to do. It's just not worth it.
What I've instructed people is, it is what it is. We're going to find stuff, and we're going to deal with it when we find it. And we have to basically deal with it according to the plans we've set in place, and we have to do it so that we can achieve closure on that area.
MS. GASTON: And you've got insurance in place so that it really pays for you to find it and clear it up.
MR. AIKEN: We had a situation, for example, we were talking about what happens if something really bad happened. It's like, if that happened, boy, we'd be hosed. Well, the answer is, that's why we bought insurance. And it's like, okay, the worst bad thing could happen, but our company is called International

Page 47

Risk Group. And that's why we're called the risk group, because we have money at risk, at stake here. We have the profit of our project at stake, so we could burn through everything and not make anything and end up on the other side looking back, going, Man, that was painful.
But the bottom line is we think we're smarter than that. We think we have it wrapped up. And I have the insurance company looking over my shoulder, who doesn't want a claim. The insurance company has looked at all this information and backed me up. And, believe me, they've looked at everything we've done and said, This is the way it's going to be. We think this, we think that, and they say, yeah, that plus some. That's your thing.
MR. KLIMUT: Do you expect them to come out every so often, as well, just to see how their investment is --
MR. AIKEN: Not only do we expect it, the way this process works is we report it on a monthly basis to them. We report to them exactly what we're doing and what decisions are being made. There are certain decisions that they're party to that we can't make the decision. They really make the decision.
We have situations where if they disagree, we

Page 48

would get together and work on it, and we do that on a monthly basis. And then about quarterly, maybe three times a year, we get together with them. We sit down and go through, here's where we are, this is what we're doing. And so they do have managers on it.
And the reason we do that is because the way these policies work, I'm not likely to make a claim for eight years. I'm going to burn through all this money before I get to the insurance policy. Well, in eight years, everybody's experience with the insurance company, the first thing they say is, That's not covered. And so the way to protect yourself from that is to basically tell them, yes, that was covered every month. So every month when they approve what we're doing, they're saying yes, you're covered. It stops any argument down the road and I'm good to go.
MR. VAN KIRK: And the other thing, Joe, is if the insurance company discovered that you weren't living up to your obligations, they would just deny any claim that you have.
MS. WEI: No, they'd cancel the policy. There's a material misrepresentation clause.
MR. VAN KIRK: And that's a huge risk. That's probably the biggest risk.
MR. AIKEN: That is a big risk, yeah, because

Page 49

this whole thing holds together based on the insurance policies. And that's not something we want happening, so I think there's enough checks and balances, plus --
MR. KLIMUT: I had to ask. You know me.
MR. AIKEN: That's okay. Plus, David, we're honest. We are the guys, right? We've always done what we said we were going to do, and that's what I think we have done.
MS. O'CONNOR: I have other comments, but they're not on the soils management plan, so does somebody else have other stuff on the soils management plan first?
Ann, can you repeat what's in paragraph 101 that you just described?
MS. WEI: Of the consent agreement? It's better to look at the consent agreement. It's not in that document. It's in the FOSET document.
MS. O'CONNOR: I know, but you're description of it --
MS. WEI: My description of it is that paragraph 101 outlines the LRA's obligations under the consent agreement. One of those obligations is that prior to transferring any of the property that -- basically, it's soil-impacted areas, such as the fire training zone, the outdoor firing range.

Page 50

It's a specific list of areas the LRA needs to either have a notice of completion, which is our NFA, of that area, that we've gone out there and cleaned it up, or if they want to transfer it prior to us cleaning it up, they have to go to the State and ask for permission for the transfer. So the State actually weighs in. And that actually happened with the fire training zone, where we went in and actually put a covenant in place to make the State comfortable enough for the transfer.

MS. GASTON: Because the fire training zone, the way it happened at transfer, rather than the LRA keeping it, it went directly to the Colorado Golf Association. It made that quick transition from the Air Force directly to a private buyer, so in that case they had to put a covenant on the property because it wasn't being held by the LRA until cleanup.

MS. WEI: And the covenant is pretty -- you can't dig. They had put fencing up around the areas of the fire training zone where they just actually are completing remediation currently. You can't excavate. There's a whole bunch of different conditions.

MS. O'CONNOR: Why do you only put the covenant on when you're going to transfer?

MS. WEI: Well, the way it worked out,

Page 51

actually, with the interim -- what we said is that what we have in place right now are interim controls on each of these areas. They're fenced. They're secure. People are not able to enter them. So for now, until we are complete with our remedial actions, interimwise, they're protected. That was our biggest concern. That was one of the concerns.

And then once we achieve remedy, then we'll be able to get the properties to transfer, hopefully, without the covenant.

MR. AIKEN: And, Christine, what I think it is is that the LRA, for all these environmental cleanups, is party to the consent agreement. So there really isn't a requirement to have them have a covenant, because they're already under a consent agreement with the State.

MS. GASTON: We have authority over them to enforce --

MR. AIKEN: But when they transfer the property, the covenant makes sure that the new land-owner follows the rules.

MS. GASTON: And we don't have any authority over the Colorado Golf Association as the property owner of the fire training zone, so if they went out there and dug something up, we'd say, well, what do we

Page 52

do?

But now they have a covenant in place. Under the statute, we have authority over what they do on that property. And in the interim, to do that until it gets dug up, we needed that. We needed to have some connection between us and the new owners.

MS. WEI: It's the same with the groundwater plumes. All have covenants on them. All the little footprints of the plumes all have a groundwater covenant on them.

MS. GASTON: Because we know that's going to take time.

MS. WEI: Yes.

MS. GASTON: And those properties are going to be transferred in the interim while the groundwater is being cleaned up, so putting a covenant on them over the long term is necessary. Did any of that help?

MS. O'CONNOR: Okay. Yeah, it does help, actually. But, okay, a couple of comments. First of all, on the plume, the land transfers on the plume --

MS. WEI: It already has, yes.

MS. O'CONNOR: It's already been transferred?

MS. GASTON: To the LRA.

MS. WEI: And the LRA owns it as of January.

MS. O'CONNOR: Oh, no, I know to the LRA, but

Page 53

I'm concerned with transferring it -- I think what you're doing on the soils is great, and you have a plan for identifying new things.

But the major thing we're worried about under the plume has already been identified, and if we're really truly concerned about the health and well-being of people that are going to be moving into homes -- and I made this objection on the FOSET, and it never got in the record or it never got answered -- I still think that they can't be transferred until the cleanup is complete and until we see more than a year or five years of the permanganate injections that are being used.

You know, my objection is to trying to hurry this along for LRA's purpose of selling the land and developing it quickly. I find that very difficult to come to grips with. I know that the State signed off on it, but --

MS. GASTON: With covenants.

MS. WEI: With covenants. There's covenants in place out there, and there's a process.

MS. O'CONNOR: Yeah, covenants that you have a system for erring.

MS. GASTON: Right. There are other plumes that already exist in Colorado underneath communities,

Page 54

and studies and tests have shown that these radon systems are effective in protecting the indoor air.
MR. BOLLMANN: There are hundreds of homes over the Redfield Rifle plume that have indoor air systems --
MS. GASTON: That are tested and tested.
MR. BOLLMANN: -- and people go in and test indoor air.
MS. GASTON: It's a proven technology, and the idea is that if they do choose to go ahead and develop over the groundwater plume, if that's their choice, then they have to put those systems in. It's just part of it.
MS. WEI: And there's a notification requirement, too.
MS. GASTON: Yeah. Homeowners will know. The homeowners make that choice. Do they buy that house, knowing what exists there? That's their choice. And if the builders want to take that risk that they'll be able to sell those houses, then that's their risk, but it is protected.
MS. O'CONNOR: Well, I still object, because I truly think that most people who live on Lowry have no clue about what the environmental problems are --
MS. GASTON: But they're not living in the

Page 55

areas affected by them.
MS. O'CONNOR: -- or the people who built.
MS. GASTON: But they will. It's disclosure law. They will have to be disclosed under law.
MS. WEI: That's why they put all this stuff of record. I mean, it's going to come up in their title search.
MS. GASTON: The banks will know when they loan them money, too. I mean, they will know as part of the covenant.
MS. WEI: Yeah, there's maps. That map is attached to every covenant that's out here for the particular areas. There's a legal description for each of those areas of the plume, and it's attached and it's of record, so when they do their title surveys and everything like that, it comes up.
MS. O'CONNOR: I truly don't see why you can't wait until we prove that Bill Alexander's numbers are actually working for over a five- or ten-year period. I mean, he has some nice charts and we've looked at them at the RAB meetings, but they're extremely limited, and some of them haven't been successful.
MS. GASTON: Well, there's progress, but it's not going to happen overnight.

Page 56

MS. O'CONNOR: But in geological time, it's a fraction, really.
MS. GASTON: But we're not depending on nature to take care of it.
MR. BOLLMANN: The standard for groundwater cleanup is the drinking water standard, and you're talking about indoor air. And they did do indoor air sampling over the plume and didn't see any concentrations that came anywhere near approaching a risk level.
MS. GASTON: North of the base.
MR. BOLLMANN: But it's the same plume.
MS. GASTON: Right. But there weren't any indoor tests done, because there aren't plumes on-base.
MR. KLIMUT: There's no indoors yet.
MS. JOHNSON: Is there a document at closing, so I, as a novice home buyer, will see a document that in plain English language is going to tell me what --
MS. WEI: You know, I don't represent the LRA. You probably have to get with them. I work for Lowry Assumption. I work with IRG on the environmental. You really need to go talk to the LRA.
MS. GASTON: My thinking is it would come up on the title search when they do the title search.
MR. AIKEN: This is fairly standard

Page 57

procedure, and what happens is that groundwater typically can take 20 years to get to the drinking water standard. The drinking water standard is an extremely low number compared to what we have in the ground and how easy it is to get to the drinking water standard.
So nationwide, by putting in these indoor air systems, they're able to allow the development progress and to allow people to live over these plumes and cut the pathway so that they're not exposed to the chemical.
Like I said earlier, I'm not sure why the State of Colorado doesn't have a law saying every house had to have this system, because pretty much everywhere in Colorado has radon, and radon is a known carcinogen. There are radon levels in people's houses right now that have no clue that are equivalent to smoking two packs of cigarettes a day. There are real risks out there.
In comparison, the risk that we're talking about with this TCE plume is much lower than the risk associated with radon. So I look at it and go, okay, it's a good thing for people to have this radon system in their house, period.
What's the comparative risk? It's a very

Page 58

difficult issue to talk to people about, because your view of a risk and my view of a risk are very different, and Ann's view is different and Sheila's view is different, because people view risks differently.

I've been at meetings where I tried to discuss risk with people, and the person on the other side of the table is smoking a cigarette, yelling at me about cancer risks for chemicals that are in the ground at 50 ppb. And I go, if you'd stop smoking the cigarette, you would be much safer in life than if I cleaned this groundwater up to 2 ppb. So it's kind of a difficult issue, but I think the solution we've come to is nationally accepted, and I think it's a decent one for what we're doing here.

MS. SOPHER: Can I also just add, as far as the LRA, they've put a lot of resources into providing information to the community, which I've been doing for them for the last year and a half. And they make a lot of effort to provide information to -- I mean, for example, at Tapestry Flats, which is right there where they're doing the gas station cleanup, we provided them with a question-and-answer sheet when they were closing on all those properties. We gave the sales people information and maps, and we answer questions all the

Page 59

time.

They have someone, which is me, answering the phone when people call to ask questions and to do public meetings when we need to and work with the builders to provide information that they can use for their buyers.

MS. WEI: And on a personal note, I live here. I actually live three blocks away here and need to run soon to go see what's going on down there, but when I actually closed my house, there was an environmental disclosure that I got from my builder with my closing packet. It was just sort of funny, because I read it and I'm, like, this looks awfully familiar to me.

But I know, for myself personally, I received environmental information when I was closing my property here, and I know most of the people that live here have, too. When I go to -- like, my kid goes to Lowry Elementary. When I see people there, they know I'm working here on the environmental. They'll come up and ask. People are aware of the environmental out here. They're sensitive to it, but they know about it.

MS. JOHNSON: I can give you an anecdote from today of someone who bought a house that went on the market an hour before she bought it. She paid full

Page 60

price. She said, I am so glad I already know all this stuff that's going on, because otherwise I would have taken the time to research it and lost the house. It would have sold to someone else.

MS. O'CONNOR: One other issue, the landfill. Some of you who know me know I've been concerned about it for several years. Specifically, I was very shocked to see the IRG intention in the section here that they want to go from open space to a mixed use, because over the years when I've asked about it, Oh, don't worry. We can't even put trees on it. It's got 30 years.

And I know he's going to say they can pay 10 million to put an impermeable barrier, but I just can't -- I feel kind of tricked. I feel kind of -- all of a sudden, you know, on January 13 you sign a covenant on the landfill, and on January 14 it transfers and IRG announces in this document its intention or the possibility that it may seek down the road to change the use. And, you know, I feel that that's dangerous.

And I also have several other landfill objections. Shall I keep going?

MR. AIKEN: That's okay. Let me just answer that one first. And Ann might want to weigh in, because I believe this was discussed in the FOSET.

Page 61

MS. WEI: It was discussed in the FOSET responsiveness summary that was put out -- when did we put the final FOSET out?

MS. O'CONNOR: September 28.

MS. WEI: Well, that's when the FOSET went out, and then we got the comments back, but the actual FOSET was done in late November. And the final document with the responsiveness summary -- and this was part of it, because CDPHE came specifically to IRG to say, You guys need to put in here and talk about, basically, that IRG Redevelopment, which is a sister company of LAC, is taking on the landfill. And that was disclosed in that document.

And right now there's a covenant on it for open space. Now, if you read the covenant statute, to modify that, there's a whole bunch of different information that the State needs. In addition to that, there's also a whole process that Denver has for entitlements and also another whole public process that this is going to have to go through with the Lowry Design Review Committee and everything else.

MS. O'CONNOR: But the fact is it's moving. It's discussed already, and despite the fact that originally that was going to be 30 years untouched, we're taking about changing it, which has been my fear

Page 62

all along.
MS. JONES: Maybe a good thing to talk about would be the process. Say the land use was going to change. What's the process that we need to go through to change the landfill?
MS. WEI: That's not the topic of this meeting.
MR. AIKEN: I will be glad to cover that at the RAB meeting and try to go through that process. But, really, this is a notification document, and it's basically a summary.
Let me give you a little bit of background on the landfill. When we were working out the details of this deal, the Air Force basically said, hey, we originally intended on transferring this to the LRA, and we want to transfer everything. The LRA basically said, Well, we don't want the landfill, because what are we going to do with it? We're going to sunset. We don't need it. City and County of Denver said, We don't take landfills. So the Air Force --
MR. BOLLMANN: We have too many already.
MR. AIKEN: We're sitting in the middle of a process where the Air Force is saying you take it; no, you take it, and nobody's going to take it. And the Air Force pretty much made it clear that unless someone

Page 63

takes it, this deal doesn't happen.
At which point we stepped up and said, We're the International Risk Group and we'll take it if we can have the potential for some kind of a future use of the property. Because as a landowner, you don't want to take a piece of property that it's impossible to do anything with.
And even when that was signed up that it would be 30 years of postclosure monitoring, the case was that if anybody wants to come in and change the use, they can go through the process of applying to change the use and going through whatever public meetings they have to go through. And we'll talk about that at another RAB meeting, what that process is, but my opinion is -- and I've talked about this at the RAB, too -- is good luck to anybody who wants to get that done, because they're going to have to run the 200 hurdles. But the bottom line is, it's not a simple process that they've got to go through. But just like any other landowner out here, they're entitled to do what they can.
The other thing about the landfill to remember -- and I think you and I had talked about this, also -- is there's only -- the landfill is 78 acres. 65, 79, there's a whole bunch of different

Page 64

numbers. But say it's 70 acres, roughly, more or less. Probably 30 acres of that along Alameda down to about -- not even halfway down to the landfill, is potentially developable. There are easements that run across it for drainage features and for drainage on Alameda. There's the toe of the damn that cuts into that 30 acres, and beyond that you're in the 500-year flood plain, and you can't build. It's not a buildable area. So the bottom part of that going into the wetlands and the wetlands themselves are not something that anybody can touch.
You always ask questions about, hey, there's a plan that shows a golf course around there, and the golf course actually owns that area in the wetlands, and so the golf course might still want to do that. But just like any other landowner, they're going to have to go through whatever procedures with the Corps of Engineers and all those guys to develop a golf course around that landfill.
MS. O'CONNOR: Okay. Well, one of my other objections is that every time I bring these issues up, you say they belong in the political process, but yet this whole section 3 is about the political process and about land use. So I just find it difficult why all these announcements by LRA that they want to hurry

Page 65

along and get -- they hope LAC will do a certain parcel quickly so they can sell. I mean, it is very political.
MS. WEI: Well, the reason it's in this document is, originally what occurred is that the State of Colorado was very sensitive to the fact that we needed to figure out a way to work the redevelopment of the base with the environmental.
So when we originally wrote this in the Transition Plan I, it was to try and figure out a way to integrate the two. So it makes sense to put in the LRA's reuse priorities in order to figure out how their priorities fit with our environmental work.
Now, this amounts to the same thing. We're trying to integrate the reuse priorities with our environmental work, so it helps to be able to tell people, this is what we've been told by the LRA, and you can put it with, this is how we think our schedule is going to go, these are the unknown conditions, and these are the issues out here.
MS. O'CONNOR: But it just makes the picture all the more clear that LRA and LAC are the same thing.
MS. WEI: No.
MS. O'CONNOR: Well, my point is, it does, so . . .

Page 66

MR. AIKEN: Well, here's the thing. The LRA is going to sunset in 2008. They have a schedule of how they want to get there and what they need to do. We've been working closely with them to try to integrate, and the whole idea of privatization is integrating environmental cleanup with the development, whereas when the Air Force was in charge, there was no integration, because the Air Force was doing their process and these guys were developing.

So there is a very big piece of this that is about integrating those things, but we are held to reach cleanup objectives and we're held to reach certain standards before we can leave the property. And we've got to get the NFA piece of it, and that's our goal. And that's really being guided by the State of Colorado.

MS. O'CONNOR: Well, I still make the objection. So I hope you're getting this, because a lot of my comments don't show up.

Then, on the monitoring -- I mean, you may want to do this at some other meeting, but the long-term monitoring that took place in 2004 and 2005 on the landfill happened four times. And then Cabrera issued a report that said we should simplify the protocol, because obviously there's no problem with

Page 67

radioactive waste.

And there's a proposal, language in here on page 2-6 that states, "For future postclosure groundwater monitoring in OU-2, Cabrera recommends a simplified protocol." I want to go on the record as objecting to that. I know you haven't signed off.

MS. GASTON: Right. That's just summarizing what the report said is all that document is saying. And it has not been approved.

MS. O'CONNOR: Well, yeah, it is summarizing it, but then they'll come up and say, well, it's in the transition plan, Chris.

MS. GASTON: But there hasn't been an approved postclosure monitoring plan yet, so that's still pending.

MS. O'CONNOR: Okay. That's not absolutely clear, reading it. I'm glad you're stating that for the record.

And then the fact that there was a gap in the monitoring between February 2005 and today, I don't understand if that was just because you guys were fighting over money or why there was no more monitoring for that whole year, but I find that difficult, and I think it should be resumed, full-scale monitoring.

MS. GASTON: That decision will come out of

Page 68

that quarterly monitoring report, and for the postclosure 30 years, whatever we decide will now continue. Once we sign off on the final closure report for the landfill, they will start their 30 year post-closure monitoring, and whatever is decided will continue, then, for 30 years, so it will start up again.

MS. O'CONNOR: It's hard to make conclusions based on four quarterly monitoring experiences and to call it "long-term monitoring" and then to make decisions based on that.

MS. GASTON: That was only meant to be four quarters to evaluate. The question was, Do we feel confident enough that these are naturally occurring chemicals or if there's contributions from the landfill. That's all that four quarters was meant to say. Does this tell us -- these specific chemicals and items that we're looking at, is that enough information to tell us what we need to know?

MS. O'CONNOR: And I would propose that it's not.

MS. GASTON: Well, actually, the radiological expert from my division has recently put some comments back to the Air Force, and there will be some discussion on whether or not that report and that

Page 69

investigation was sufficient. So that still has not been answered.

MS. O'CONNOR: Well, that's good. But this is the only forum I have to bring it up, and I don't talk to you on a daily basis. So that was my other objection.

And then I had sent Sarah a letter asking again -- and you don't have to answer here, but I would like an answer, by the State, probably, why the monitoring can't be extended into the wetlands. It's just interesting that all the monitoring under the groundwater or under the landfill goes around and that hasn't really been extensive monitoring since the RI and the SRI determined that it was safe.

But the fact that the radioactive results increased downgradient leaves me to think if you went another 20 feet or another 50 feet, something might show up, and I'm just asking for you to consider including that.

MS. GASTON: Part of that discussion will come out of the RAD monitoring that's being determined right now as to whether or not future monitoring will require additional monitoring as far as groundwater flow and what we're seeing.

MS. O'CONNOR: But this isn't the right

a90d9772-6955-4604-be1c-32078b0aa328

place.
MS. GASTON: Well, it's a good comment, and it's something that will be addressed -- we're still addressing. So what our long-term monitoring is going to be and whether we have sufficient monitoring to catch downgradient of the landfill, it's still an ongoing discussion.
MS. O'CONNOR: Okay. Anything else?
MR. KLIMUT: I don't think so.
MR. AIKEN: Any other comments?
MS. O'CONNOR: Thank you.
MR. AIKEN: We appreciate everybody's input, and we really are happy that everybody came out tonight, because this is the first meeting we've had in our new office here.
MS. SOPHER: Could everyone make sure you sign in on the sign-up sheet?
MR. AIKEN: I guess that's the end of the meeting. And if you've got any other questions, just give me a buzz or call Elizabeth.
WHEREUPON, the within proceedings were adjourned at approximately 7:00 p.m. on the 15th day of March, 2006.
* * * * *

REPORTER'S CERTIFICATE

STATE OF COLORADO)
) ss.
CITY AND COUNTY OF DENVER)

I, SUSAN G. SCHNEIDER, Shorthand Reporter and Notary Public, State of Colorado, do hereby certify that the within proceedings were taken in machine shorthand by me at the time and place aforesaid and were thereafter reduced to typewritten form; that the foregoing is a true transcript of the proceedings had.

I further certify that I am not employed by, related to, nor counsel for any of the parties herein, nor otherwise interested in the outcome of this proceeding.

IN WITNESS WHEREOF, I have affixed my signature this 24th day of March, 2006.

My commission expires May 17, 2007.