



**PHASE I
ENVIRONMENTAL SITE ASSESSMENT**

0 Riverside Dr.
Reno, Nevada, 89503
(APNs: 010-590-02)

Prepared for:

Nevada Division of Environmental Protection-Brownfields Program
Attn: Mr. David Friedman
901 S. Stewart St., Suite 4001
Carson City, NV 89701
Task BC03-19
Category 54
Organizational Code 5429
Job Number 6681717

Prepared by:

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April 3, 2019

Project No.: 18-02-211



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Creating Solutions. Building Trust.

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Nevada Division of Environmental Protection-Brownfields Program
901 S. Stewart St., Suite 4001
Carson City, NV 89701

Attn: Mr. David Friedman

RE: Phase I Environmental Site Assessment, 0 Riverside Dr., (APNs: 010-590-02), Reno, Nevada 89503.

Dear Mr. Friedman:

Attached is the report titled *Phase I Environmental Site Assessment, 0 Riverside Dr., (APNs: 010-590-02), Reno, Nevada 89503*. This report includes a description of activities performed and results obtained from the investigation.

Should you have questions regarding the work performed or results obtained, please do not hesitate to contact us.

Sincerely,

BROADBENT & ASSOCIATES, INC.

Brandon Reiff, PG, CEM #2300 (exp. 3/23/20)
Senior Geologist

Enclosure: Phase I Environmental Site Assessment

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- A Assessor's Parcel Map
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- C Environmental Records Search Report
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List of Commonly Used Acronyms

AAI – All Appropriate Inquiries
APN – Assessor’s Parcel Number
AST – Aboveground Storage Tank
ASTM – ASTM International
Broadbent – Broadbent & Associates, Inc.
CDL – Clandestine Drug Laboratory
CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act
CFR – Code of Federal Regulations
CREC – Controlled Recognized Environmental Condition
EDR – Environmental Data Resources
EMI – Emissions Inventory Data
EPA – United States Environmental Protection Agency
ESA – Environmental Site Assessment
FID – Facility Inventory Database
FINDS – Facility Index System
FIFRA – Federal Insecticide, Fungicide and Rodenticide Act
HAZNET – Hazardous Waste Facility & Manifest Database
HREC – Historical Recognized Environmental Condition
LF – Landfill
LUST – Leaking Underground Storage Tank
NDEP – Nevada Division of Environmental Protection
NPL – National Priorities List
PCB – Polychlorinated-biphenyls
ppb – Parts per billion
ppm – Parts per million
PVC – polyvinyl chloride
RCRA – Resource Conservation & Recovery Act
RCRIS – Resource Conservation & Recovery Act Information System
RDA – Redevelopment Agency
REC – Recognized Environmental Condition
SARA – Superfund Amendments and Reauthorization Act
SLIC – Spills, Leaks, and Investigation Cleanups
SCS – Soil Conservation Service
SWEEPS – Statewide Environmental Evaluation and Planning System
SWF – Solid Waste Facility
SWRCY – Solid Waste Recycler Database
TSCA – Toxic Substances Control Act
USDA – United States Department of Agriculture
USGS – United States Geological Survey
UST – Underground Storage Tank

Executive Summary

To assist the City of Reno with their due diligence efforts, Broadbent & Associates, Inc. (Broadbent) has conducted this Phase I Environmental Site Assessment (ESA) on the real property located at 0 Riverside Dr. (APN 010-590-02), Reno, Nevada, 89503. This ESA was conducted in conformance with the scope and limitations of ASTM Practice E1527-13: *Standard Practice for Environmental Site Assessments – Phase I Environmental Site Assessment Process*, and the United States Environmental Protection Agency (EPA) final rule contained within Code of Federal Regulations Volume 40 Part 312 – *Standards and Practices for All Appropriate Inquiries*. Exceptions to, or deletions from, this practice are described in Section 1 of this report. Use of the referenced ASTM Process is intended to satisfy requirements for conducting “all appropriate inquiries” (AAI) under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

This assessment has revealed recognized environmental conditions in connection with the Property. The site visit and review of historic photograph and records documentation indicate that there are two vacant residential building structures on the Property, constructed at separate times and that appear to be approximately 53 years old.

RECs associated with asbestos containing material (ACM) and lead based paint (LBP) are identified for the two building structures on the Property based on the following:

- Age of the buildings and the potential for presence of ACMs and/or LBP;
- Unknown condition of structural materials potentially containing ACMs and/or LBP; and
- Undetermined future use of the existing structures on the Property.

For ACM, should renovation and/or demolition activities be undertaken, then it is recommended that an Asbestos Demolition/Renovation Survey be completed and that all ACM that will be impacted by the demolition and/or renovation be properly abated to comply with federal and state regulations.

For LBP, it is recommended that any area to be disturbed be checked prior to disturbance to be in compliance with Nevada lead regulation requirements.

Section 1: Introduction

This section describes the purpose of and authorization for conducting this assessment. Also discussed are significant assumptions, deviations, special terms and conditions, and user reliance on this report.

1.1 Purpose

To assist the City of Reno with their due diligence efforts relative to the site located at 0 Riverside Dr., APN: 010-590-02, (APN: 010-590-02) in Reno, NV (Property), Broadbent & Associates, Inc. (Broadbent) conducted an All Appropriate Inquiry Phase I Environmental Site Assessment (ESA) consistent with the ASTM International Standard E1527-13: *Standard Practice for Environmental Site Assessments – Phase I Environmental Site Assessment Process*, and the United States Environmental Protection Agency (EPA) final rule contained within Code of Federal Regulations (CFR) Volume 40 Part 312 – *Standards and Practices for All Appropriate Inquiries* (AAI). The purpose of this due diligence investigation is to identify recognized environmental conditions (RECs), controlled recognized environmental conditions (CRECs), historical recognized environmental conditions (HRECs), and/or *de minimis* conditions as defined below.

A REC is defined by ASTM International as:

“The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. *De minimis* conditions are not recognized environmental conditions.”

A HREC is defined by ASTM International as:

“A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).”

A CREC is defined by ASTM International as:

“A recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).”

A *De Minimis* Condition is defined by ASTM International as:

“A condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* conditions are not recognized environmental conditions nor controlled recognized environmental conditions.”

1.2 Scope of Work

Various investigative methods were utilized to complete this ESA. Specific items accomplished include the following:

- Prepared a general site description
- Reviewed User-provided information
- Reviewed readily ascertainable environmental records
- Conducted a site reconnaissance
- Conducted interviews
- Identified data gaps (if present)
- Prepared this ESA report summarizing assessment results

1.3 Significant Assumptions

Conclusions stated in this report are based upon observations made by employees of Broadbent and also upon information provided by others. It is assumed that these observations and information are accurate. However, Broadbent cannot be held responsible for the accuracy of the information provided by others. The scope of this ESA does not purport to encompass every report, record, or other form of documentation relevant to the Property being evaluated.

1.4 Deviations

There were no deviations from the ASTM International standards.

1.5 Special Terms and Conditions

Observations contained within this assessment are based upon Property conditions readily visible and present at the time of the site reconnaissance. These Property observations are unable to specifically identify conditions of potential mold, asbestos containing building materials, subsurface soil, groundwater, vapor, or underground storage tanks, unless specifically mentioned. This ESA does not attempt to address the unidentified past or forecast future Property conditions.

1.6 Reliance

The enclosed ESA has been conducted for the City of Reno and may not be reproduced, distributed, or relied upon by others without the prior written authorization of the City of Reno and Broadbent. A Reliance Letter can be prepared for additional use upon request by the City of Reno.

Section 2: Site Description

This section describes the Property with its location and legal description, general vicinity characteristics, current uses, description of on-site improvements, and current uses of adjoining properties.

2.1 Location and Legal Description

The Property is located within the incorporated limits of Reno, NV. The Property's current physical address is 0 Riverside Dr., APN: 010-590-02, Reno, NV. The Property consists of one parcel assigned Washoe County Assessor's Parcel Number 010-590-02. The subject parcel is wholly contained by APN 010-501-01 which forms a perimeter of undeveloped land around it. This is a non-typical parcel arrangement. A copy of the Washoe County Assessor's Parcel Map for the Property is provided in Appendix A.

Approximate latitude and longitude coordinates for the center of the Property are 39.520853 North, -119.827482 West NAD83. The Property is located within the southeast quarter of Section 10, Township 19 North, Range 19 East, relative to the Mount Diablo Baseline and Meridian. The Property is covered by the United States Geological Survey (USGS) 6723545 Reno, NV 7.5-minute quadrangle topographic map. A Site Location and Property Location Map are provided as Figures 1 and 2, respectively.

2.2 Current Uses of the Site

The Property is a residential lot with two vacant residential building structures. The two vacant residential building structures are not identified on the Washoe County Assessor information for the Property. Although the county assessor's record (Appendix A) indicates the Property to be vacant, the site visit and review of historic photograph and records documentation indicate that there are two vacant structures on the Property. The two building structures appear to be constructed at separate times and appear to be at least 53 years old.

RECs associated with asbestos containing material (ACM) and lead based paint (LBP) are identified for the two building structures on the Property based on the following:

- Age of the buildings and the potential for presence of ACMs and/or LBP;
- Unknown condition of structural materials potentially containing ACMs and/or LBP; and
- Undetermined future use of the existing structures on the Property.

For ACM, should renovation and/or demolition activities be undertaken, then it is recommended that an Asbestos Demolition/Renovation Survey be completed and that all ACM that will be impacted by the demolition and/or renovation be properly abated to comply with federal and state regulations.

For LBP, it is recommended that any area to be disturbed be checked prior to disturbance to be in compliance with Nevada lead regulation requirements.

2.3 Description of Structures, Roads, and Other Improvements

The Property is a residential lot with two vacant residential building structures. The two vacant residential building structures are not identified on the Washoe County Assessor information for the Property. Although the county assessor's record (Appendix A) indicates the Property to be vacant, the site visit and review of historic photograph and records documentation indicate that there are two vacant structures on

the Property. The two building structures appear to be constructed at separate times and appear to be at least 53 years old.

Additional Property information is provided in the table below.

Size of Property (approximate)	According to the Washoe County Assessor, the approximate size of parcel 010-590-02 is 3.255 acres.
General Topography of Property	The Property has a gradual downward slope to the east-northeast.
Adjoining and/or Access/Egress Roads	The Property is accessible by entrances/exits on the southeastern side of the Property via Riverside Dr. and on the eastern side via an unnamed alley.
Paved or Concrete Areas (including parking)	Paved or concrete areas were not observed on the Property.
Unimproved Areas	There are no known unimproved areas.
Landscaped Areas	No landscaped areas were observed on the Property.
Surface Water	The Truckee River is adjacent south of the Property.
Potable Water Source	Truckee Meadows Water Authority
Sanitary Sewer Utility	Washoe County
Storm Sewer Utility	Washoe County
Electrical Utility	NV Energy
Natural Gas Utility	NV Energy

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For LBP, it is recommended that any area to be disturbed be checked prior to disturbance to be in compliance with Nevada lead regulation requirements.

2.4 Current Uses of Adjoining Properties

Adjoining properties are used for various purposes. As stated in Section 2.1, the Property parcel (010-590-02) and parcel APN 010-590-01 are related in an extraordinary manner where the Property parcel APN 010-590-

02 is wholly enclosed within APN 010-590-01. Uses of adjoining properties at the time of this investigation are the following:

<i>Direction</i>	<i>Address</i>	<i>Use & Occupant</i>	<i>Comments</i>
North	1140 Jones St. N/A	Near River Apartments Jones St.	APN: 010-062-01 Public throughfare
South	0 Riverside Dr. N/A	Vacant lot Truckee River	APN: 010-590-01 None
West	1200 Riverside Dr.	Riverside Drive Condos	Several APNs
East	N/A N/A 1101 Riverside Dr. 1077 Riverside Dr.	Unnamed Alley Riverside Dr. Riverside Dr. Apartments Riverview Apartments	Public throughfare Public throughfare APN: 011-082-33 APN: 011-082-33

No RECs, CRECs, and/or HRECs were identified relative to the Property based on review of current uses of adjoining properties.

Section 3: User-Provided Information

The purpose of this section is to detail User-provided information used to help identify the possibility of RECs in connection with the Property. A User Questionnaire was provided to the User to assist them in compiling pertinent information. User-provided information is summarized below.

3.1 Owner, Key Property Manager, or Occupant Provided Information

According to Washoe County Assessor Data, the Property is owned by the City of Reno. The Property is currently a vacant lot with two vacant residential building structures.

3.2 Title Records, Environmental Liens or Activity and Use Limitations

Reasonably ascertainable recorded land title records should be checked by the User to identify environmental liens or activity and use limitations, if currently recorded against the Property. Environmental liens or activity and use limitations so identified are supposed to be reported to the Environmental Professional conducting the ESA. No evidence of environmental liens or activity and/or use limitations was discovered or brought to the attention of Broadbent.

No RECs, CRECs, and/or HRECs were identified relative to the Property based on review of title records, environmental liens, or activity and use limitations.

3.3 Specialized Knowledge

If the User has or is aware of any specialized knowledge or experience that is material to RECs in connection with the Property, it is the User's responsibility to communicate this information to the Environmental Professional. The User provided no Specialized Knowledge relative to the Property.

No RECs, CRECs, and/or HRECs were identified relative to the Property based on review of available specialized knowledge.

3.4 Valuation Reduction for Environmental Issues

In a transaction involving the purchase of a parcel of real estate, if a User has actual knowledge that the purchase price of the Property is significantly less than the purchase price of comparable properties, the User should try to identify an explanation for the lower price and to make a written record of such explanation. User provided no information relative to valuation reduction relative to the Property.

No RECs, CRECs, and/or HRECs were noted relative to the Property based on review of information relative to valuation reduction for environmental issues.

3.5 Reason for Conducting Phase I

The purpose of this ESA was to identify existing or potential RECs, CRECs, and/or HRECs (as defined by ASTM Standard E1527-13) in connection with the Property, and it is assumed to also be to qualify the User for Landowner Liability Protection (LLP) relative to potential CERCLA liability.

Section 4: Records Review

The purpose of a Records Review is to obtain and review records that will help identify RECs, CRECs, and/or HRECs in connection with the Property. A discussion of each record source is provided below.

4.1 Physical Setting

Physical setting information for the Property was obtained by a review of sources that included, but was not limited to, USGS topographic maps and a USDA soil survey report.

4.1.1 Topography

The USGS, 6723545 Reno, NV Quadrangle 7.5-Minute series topographic map was reviewed for this ESA. According to the contour lines on the topographic map, the Property is located at an approximate elevation of 4,513 feet above mean sea level. The contour lines in vicinity of the Property indicate the area has a gradual downward slope to the east-northeast.

4.1.2 Surface Water Bodies

The Truckee River is adjacent south of the Property. No on-site water wells or springs were observed during the Property reconnaissance. No settling ponds, lagoons, surface impoundments, wetlands or natural catch basins were observed on the Property during this investigation.

4.1.3 Geology and Hydrology

The Property is located southwest of downtown Reno, NV. The geological deposits of this area are described by the USGS as stratified sequences of quaternary alluvium. Based on the soil survey maps published by the USDA Soil Conservation Service (SCS), the Property is predominately mapped as "Orr" which is gravelly sandy loam soil texture. The Property soil hydrologic group classification is Class B – Moderate infiltration rates. Class B soils are "deep and moderately deep, moderately well and well drained soils with moderately coarse textures."

The groundwater flow direction in the vicinity of the Property is assumed to be toward the south towards the adjacent Truckee River. Depth to groundwater is expected to be approximately 5-15 feet below land surface (BLS) in the area near and beneath the Property, according to the Nevada Division of Water Resources on-line Well Log Database.

4.2 Environmental Record Sources

Broadbent contracted Environmental Data Resources, Inc. (EDR) to conduct a search of available state, federal, and other ascertainable environmental records. The area searched included the Property and surrounding area within approximate minimum search distances from the Property boundary, dependent on listing type, as defined by ASTM International. A complete listing of records searched is available in the EDR Radius Report provided in Appendix C. An abbreviated list of search results is provided in the table below relative to records that identified a regulatory listing relevant to the Property. A subsequent discussion is provided relative to identified potential concerns.

<i>Standard Database List Per ASTM International</i>	<i>Database Date (M/D/Y)</i>	<i>Subject Property Listed (Y or N)</i>	<i>Total No. of Listings</i>	<i>Environmental Concern Posed to the Subject Property (Y or N)</i>
Federal Agencies				
Federal NPL Sites (<1.0 mile)	11/14/18	N	0	N
Federal Delisted NPL Sites (<1.0 mile)	11/14/18	N	0	N
Federal SEMS Sites (< 0.5 mile)	11/14/18	N	0	N
Federal CERCLIS NFRAP Sites (<0.5 mile)	11/14/18	N	0	N
RCRA CORRACTS Sites (<1.0 mile)	3/1/18	N	0	N
RCRA non-CORRACTS TSD Facilities (< 0.5 mile)	3/1/18	N	0	N
RCRA LQG (<0.25 mile)	3/1/18	N	0	N
RCRA SQG (<0.25 mile)	3/1/18	N	0	N
RCRA CESQG (<0.25 mile)	3/1/18	N	1	N
Federal ERNS Sites (Property Only)	9/24/18	N	0	N
US Institutional/Engineering Controls (<0.5 mile)	7/31/18	N	0	N
State Agencies				
State & Tribal equivalent CERCLIS (SHWS) (<1.0 mile)	9/18/18	N	165	N
State & Tribal SWF/LF (<0.5 mile)	8/27/18	N	0	N
State & Tribal LUST (<0.5 mile)	9/18/18	N	0	N
State & Tribal ASTs (<0.25 mile)	1/25/18	N	0	N
State & Tribal USTs (<0.25 mile)	1/25/18	N	6	N
State & Tribal Voluntary Cleanup Sites (<0.5 mile)	9/18/18	N	0	N
State & Tribal Brownfield Sites (<0.5 mile)	9/18/18	N	0	N
Other Ascertainable Records				
US Brownfields (<0.5 mile)	9/18/18	N	0	N
Recycling Facilities in Nevada (SWRCY) (<0.5 mile)	10/12/18	N	5	N
RCRA-NonGen (<0.25)	3/1/18	N	3	N
EDR Exclusive				
EDR US Historic Auto Station (<0.125 mile)	NA	N	1	N
EDR US Historic Dry Cleaners (<0.125 mile)	NA	N	0	N
EDR US Manufactured Gas Plants (<0.25 mile)	NA	N	1	N

Based on information contained within the EDR report, the Property was not listed in the databases that were searched. Database results for properties surrounding the target property are discussed below.

Results of the records search found 165 sites located within one mile of the Property listed on the Corrective Action Sites (SHWS) database. Six of these SHWS sites are within 0.25 miles of the Property. These six sites were identified as petroleum hydrocarbon releases affecting soil and/or groundwater. Each of these six sites

have been granted closure by the appropriate agency. Given the site statuses and distance from the Property, the potential for environmental impact to the Property appears to be low.

Other sites listed in the table above, but not yet specifically discussed, do not likely pose a significant environmental concern relative to the Property for one or more of the following reasons: distance from Property; relative location to the Property, regulatory status of site, operating UST facilities with no violations, UST facilities that are permanently out of service, site listing not indicative of a release but rather simply indicating that the site/facility may possess chemicals of concern (e.g. RCRA Non-Gen).

4.3 Vapor Intrusion

Vapor intrusion occurs when chemicals volatilize and migrate from impacted soil and/or groundwater up into a building's interior space. Vapor intrusion can pose a potential health threat to the occupants of the building, especially to sensitive populations such as the elderly and children.

Sites within the approximate minimum search distances of 1/3 of a mile for chemicals of concern (COC) and 1/10 of a mile for petroleum hydrocarbon COC were reviewed. Based on the regulatory status, the characteristics of the offsite suspect sources, and/or lack of documented groundwater plumes within the areas of concern, it is unlikely that the Property has been impacted by vapor intrusion from surrounding sites.

4.4 Historical Record Sources

The following standard historical sources may be used to meet the historical record sources review requirements of ASTM E1527-13: aerial photographs; fire insurance maps; property tax files; land title records (although these cannot be the sole historical source consulted); topographic maps; city directories; building department records; or zoning/land use records. ASTM E1527-13 requires "All obvious uses of the property shall be identified from the present, back to the property's first developed use, or back to 1940, whichever is earlier." This task requires reviewing only as many of the standard historical sources as are necessary and that are reasonably ascertainable and likely to be useful.

4.4.1 Historical Topographic Maps

The following historical topographic maps were reviewed and described. Copies of the historical topographic maps are provided in Appendix D.

<i>Date(s)</i>	<i>Map Source & Scale</i>	<i>Property Observations</i>	<i>Surrounding Area Observations</i>
1891	Reno Quad 1:125000	Property is undeveloped.	Downtown Reno is recorded east of the Property on this map. Central Pacific Railroad, V&T Railroad, and the Truckee River are recorded on this map.
1893	Reno Quad 1:125000	No significant change.	No significant change.

1950	Reno Quad 1:62500	No significant change.	Increasing development of downtown Reno area. Apparent building structures are observed south of the Property. Reno High School, S. Virginia St., Riverside Dr., Idlewild Park, University of Nevada-Reno, Virginia Lake, and Highland Reservoir are recorded on this map.
1951	Reno Quad 1:62500	No significant change.	No significant change.
1967	Reno Quad 1:62500	No significant change.	McKinley Park School is identified east of the Property. A trailer park is recorded northwest of the Property. I-80 and the Union Pacific Railroad are recorded north of the Property.
1974	Reno Quad 1:24000	No significant change.	Increasing development of Reno. Interstate 80 is being constructed on the map. Surrounding area of the Property is predominately residential/commercial.
1982	Reno Quad 1:24000	No significant change.	I-80 is developed north of the Property. Apparent residential structures are developed southeast of the Property.
2015	Reno Quad 1:24000	No significant change.	Surrounding area appears to be developed in their current configuration on this map.

No RECs, CRECs, and/or HRECs were identified relative to the Property based on review of the historical topographic maps.

4.4.2 Historical Aerial Photographs

The following historical aerial photographs were reviewed and described. Copies of the historical aerial photographs are provided in Appendix D.

Date(s)	Photo Source & Scale	Property Observations	Surrounding Area Observations
1939	USDA 1" = 500'	Property is developed with apparent residential structures.	Surrounding area is predominately developed with apparent residential/agricultural use. Downtown Reno is adjacent northeast of the Property. The Truckee River is adjacent south of the Property. Apparent residential structures are seen adjacent north and east of the Property.

1946	USGS 1" = 500'	Property is covered with several trees.	Surrounding area is slightly more developed with apparent agricultural and residential use.
1953	USGS 1" = 500'	Apparent small building structures are developed on the Property.	Further developments of apparent residential structures in vicinity of the Property. Apparent residential and apartment buildings are seen adjacent north of the Property. Apparent residential buildings are developed adjacent east of the Property. Reno High School is seen south of the Property in this photo.
1962	NHD 1" = 500'	No significant change.	Further development of Reno High School is seen in this photo.
1966	USGS 1" = 500'	No significant change.	Development of apartment complex adjacent north and east of the Property. Vacant land west of the Property. Keystone Ave. is being expanded to four lanes in this photo.
1972	SLA 1" = 500'	Three small building structure appears on the Property in this photo.	Condos are developed adjacent west of the Property. Three small building structure appear adjacent north of the Property in this photo. Construction on Keystone Ave. is completed in this photo.
1974	USGS 1" = 1000'	No significant change.	No significant change.
1980	USGS 1" = 750'	No significant change (poor quality photo).	No significant change (poor quality photo).
1984	USGS 1" = 1000'	No significant change.	Construction of I-80 is seen north of the Property in this photo.
1994	USGS 1" = 500'	No significant change (poor quality photo).	No significant change (poor quality photo).
1999	USGS/DOQQ 1" = 500'	Two small residential building structures appear on the Property.	No significant change.
2006	USDA/NAIP 1" = 500'	No significant change.	Surrounding area buildings appear to be developed in their current configuration in this photo.

2010	USDA/NAIP 1" = 500'	No significant change.	No significant change.
2013	USDA/NAIP 1" = 500'	No significant change.	No significant change.
2017	USDA/NAIP 1" = 500'	No significant change.	No significant change.

Currently, two vacant residential building structures are identified on the Property. Evidence of former structures noted on the Property were not identified during the site reconnaissance. No RECs, CRECs, and/or HRECs were identified relative to the Property based on review of the historical aerial photographs.

4.4.3 Fire Insurance Maps

Fire insurance maps were initially produced by private companies (such as Sanborn, Perris, and the Fire Underwriters Inspection Bureau) for the insurance industry to provide information on the fire risks of buildings and other structures. Fire insurance maps have become a valuable historical resource for persons concerned with evaluating the potential for site contamination based on the history of past Property use. Fire insurance maps are available for approximately 12,000 US cities and towns during the period from 1852 to the present. Map coverage is most comprehensive in urban core areas and in older suburbs. Map coverage is limited in suburban areas developed after 1950. Broadbent queried EDR's collection of fire insurance maps for coverage of the Property. A copy of the Certified Sanborn Map Report is provided in Appendix D.

Date(s)	Map Source	Property Observations	Surrounding Area Observations
1918	Sanborn	Property is mapped with two small building structures.	Riverside Dr. and Jones St. are mapped. Surrounding area appears to be developed primarily with residential structures. Residential structures are adjacent north and east of the Property on this map. The Truckee River is mapped adjacent south of the Property.
1949	Sanborn	Property is developed with four small structures.	Surrounding area appears to be developed with mixed residential and commercial structures. Further development of apparent residential structures northeast of the Property.
1955	Sanborn	No significant change.	Further development of apparent residential buildings and apartment complex appears north of the Property on this map.
1957	Sanborn	No significant change.	No significant change.

1966	Sanborn	No significant change.	Development of apartment buildings are observed adjacent north and east of the Property on this map.
1970	Sanborn	No significant change.	No significant change.
1972	Sanborn	No significant change.	No significant change.

Currently, two vacant residential building structures are identified on the Property. Evidence of former structures noted on the Property were not identified during the site reconnaissance. No environmental RECs, CRECs, and/or HRECs were identified relative to the Property based on review of the historical fire insurance maps.

4.4.4 City Directories

City directories have been published for cities and towns across the US since the 1700s. Originally a list of residents, the city directory developed into a sophisticated tool for locating individuals and businesses in a particular urban or suburban area. Twentieth-century directories are generally developed into three sections: a business index, a list of resident names and addresses, and a street index. With each address, the directory lists the name of the resident or, if a business is operated from this address, the name and type of business (if unclear from the name). While city directory coverage is comprehensive for major cities, it may be less comprehensive for rural areas and small towns.

Broadbent requested EDR to provide a search of available historic city directories that may list the Property. EDR researched Cole Information and Polk's City Directories for non-sequential years beginning in 1932 and up to 2013. It should be noted that residential addresses within the unincorporated portions of counties were typically not included within city directories. Results of this search did not yield any results on the target Property. Results of this search are included in Appendix D.

No environmental RECs, CRECs, and/or HRECs were noted relative to the Property based on review of the historical city directories.

4.5 Other Environmental Records

Other environmental reports were not reviewed as a part of this ESA.

Section 5: Site Reconnaissance

Mr. Brandon Reiff of Broadbent conducted a site reconnaissance of the Property on January 15, 2019, as discussed below. The weather was snowing and cold. Photographs of the Property and vicinity taken during the site reconnaissance are provided within Appendix E.

5.1 Hazardous Substances in Connection with Identified Uses

No hazardous substances or petroleum products in connection with current identified uses were observed within the boundaries of the Property during the site reconnaissance. No hazardous substances or petroleum products in connection with current identified uses were observed on properties adjoining the Property when observed from the Property or publicly accessible areas. As such, no RECs from hazardous substances or petroleum products in connection with current identified uses were known to be present on the Property at the time of the reconnaissance.

5.2 Hazardous Substance and Unidentified Substance Containers

No hazardous substance, unidentified substance, or petroleum products containers were observed within the boundaries of the Property during the site reconnaissance. No hazardous substance, unidentified substance, or petroleum product containers were observed on properties adjoining the Property when observed from the Property or publicly-accessible areas. As such, no RECs from hazardous substance or unidentified substance containers were known to be present on the Property at the time of the reconnaissance.

5.3 Storage Tanks

No evidence of existing or historic storage tanks, vent pipes, fill pipes, or access ways indicating USTs or ASTs was observed within the boundaries of the Property during the site reconnaissance or records review. No evidence of storage tanks was observed on properties adjoining the Property when observed from the Property or publicly-accessible areas. As such, no RECs from storage tanks were known to be present on the Property at the time of the reconnaissance.

5.4 Polychlorinated Biphenyls

Polychlorinated biphenyls (PCBs) are a class of stable compounds that are toxic to the liver and are linked to cancer. The US EPA considers PCBs a Priority Pollutant under the Clean Water Act. The maximum contaminant level of PCBs allowed in drinking water is 0.5 parts per billion (ppb). Due to PCBs' toxicity and classification as a persistent organic pollutant, the United States prohibited the manufacture of PCBs after July 1, 1979 in the Toxic Substances Control Act (TSCA) of 1976. Until then, PCBs were widely used as coolant and dielectric insulating fluids for oil-filled electrical transformers and capacitors (such as those used in ballasts of old fluorescent and high-intensity discharge lights). PCBs were also used as plasticizers in paints and cements, stabilizing additives in flexible polyvinyl chloride (PVC) coatings of electrical wiring and electronic components, pesticide extenders, cutting oils, reactive flame retardants, lubricating oils, vacuum pump fluids, hydraulic fluids, and sealants for caulking in schools and commercial buildings.

Although manufacture was prohibited after 1979, PCBs already in commerce continued to be allowed in "totally enclosed uses" such as transformers and capacitors. Due to their extended working life, some oil-filled electrical equipment may still contain PCBs. The US EPA considers a product to be "PCB-Contaminated" if the oil contains between 50-500 parts per million (ppm), and to be a PCB product if more than 500 ppm. After July 1, 1979 and through 1998, the US EPA required new oil-filled electrical equipment to be marked "No

PCBs.” If an item is not so labeled, and no information is available as to the date of manufacture, an item might be assumed to contain PCBs until proven otherwise. PCB content may or may not be a matter of record with equipment or transformers belonging to a utility company.

No indication of leaks or releases from electrical equipment was observed during the site visit. No verifiable RECs, CRECs, and/or HRECs associated with PCBs were observed or known to be present on the Property at the time of the site reconnaissance.

5.5 Odors, Pools of Liquid

No pools of liquids and/or standing surface water were observed within the boundaries of the Property during the site reconnaissance. No strong, pungent, or noxious odors were noted during the site reconnaissance. No odors, pools of liquid, or standing surface water were observed on properties adjoining the Property when observed from the Property or publicly-accessible areas. As such, no RECs associated with potential odors, pools of liquid, or standing surface water were known to be present on the Property at the time of the site reconnaissance.

5.6 Pits, Ponds, Lagoons

No pits, ponds, or lagoons were observed within the boundaries of the Property during the site reconnaissance. No pits, ponds, or lagoons were observed on properties adjoining the Property when observed from the Property or publicly-accessible areas. As such, no RECs from pits, ponds, or lagoons were known to be present on the Property at the time of the reconnaissance.

5.7 Stained Soil/Pavement, Stressed Vegetation

Stained soil and/or pavement was not observed within the boundaries of the Property during the Property reconnaissance. Additionally, stressed vegetation was not observed on the Property or properties adjoining the Property when observed from the Property or publicly-accessible areas. As such, no RECs from stressed vegetation or stained pavement were observed to be present on the Property at the time of site reconnaissance.

5.8 Indications of Solid Waste Disposal

Evidence of solid waste disposal was observed on the Property during the reconnaissance visit. Various trash and wood poles were observed on the Property. Solid waste is not a part of the definition of a REC. Consequently, no RECs from solid waste disposal are known to be present at the Property. However, the potential exists for a REC to be concealed by the solid waste.

5.9 Water, Storm Water, and Wastewater

Evidence of constructed storm water management drainage channels was observed along Riverside Dr. adjacent southeast of the Property. No evidence of on-site current or historic water supply wells, constructed storm water management systems, or historic wastewater systems was observed within the boundaries of the Property during the Property reconnaissance or discovered during interviews or records review. As such, no RECs from water, storm water, or wastewater were known to be present on the Property at the time of the reconnaissance.

5.10 Asbestos-Containing Material

Asbestos containing material (ACM) is commonly found in buildings constructed prior to the 1980s. Since the two vacant buildings on the Property appear to be at-least 53 years old (based on review of historical photographs and Sanborn maps) the potential exists for ACM. Subsequently, RECs associated with ACM are identified for the Property based on the following:

- Potential for presence of ACMs;
- Unknown condition of structural materials potentially containing ACMs; and
- Undetermined future use or demolition of the existing structures on the Property.

For ACM, should demolition and/or renovation activities be undertaken, then it is recommended that an Asbestos Demolition/Renovation Survey be completed and that all ACM that will be impacted by the demolition and/or renovation be properly abated to comply with federal and state regulations.

5.11 Lead-Based Paint

Lead based paint (LBP) is a hazard in residential properties constructed prior to 1978. Since the two vacant buildings on the Property appear to be at-least 53 years old (based on review of historical photographs and Sanborn maps) the potential for LBP exists. Subsequently, RECs associated with LBP are identified for the Property based on the following:

- Potential for presence of LBP;
- Unknown condition of structural materials potentially containing LBP; and
- Undetermined future use of the existing structure on the Property

For LBP, it is recommended that any area to be disturbed be checked prior to disturbance to be in compliance with Nevada lead regulation requirements.

Section 6: Interviews

The following interviews were conducted in accordance with the requirements of ASTM E1527-13.

6.1 Interviews with Past and Present Owners and Occupants

Interviews were conducted with the following individuals. Use-Provided Information Questionnaires completed by the interviewees are provided in Appendix B.

<i>Role</i>	<i>Title</i>	<i>Name</i>	<i>Company</i>	<i>Method</i>	<i>Comments</i>
ESA User	Property Agent	Ms. Lori Miles	City of Reno	Questionnaire	No known environmental liens or contamination.

No RECs, CRECs, and/or HRECs were noted relative to the Property based on review of information gathered via interviews.

6.2 Interviews with State and/or Local Government Officials

Broadbent contacted the Nevada Division of Environmental Protection (NDEP) and Washoe County Health Department (WCHD) with regard to reported environmental issues at the Property. No environmental records were found in regard to the subject Property.

Section 7: Data Gaps

A data failure is failure to achieve the historical research objectives of ASTM E1527-13. A data gap is the incompleteness in activities required in this practice. The following data gaps occurred during conduct of this ESA: Recorded land title records were not provided by the client, County and City development records were not reviewed, and no coverage of City Directory was provided for the Property.

Based on the experience and good faith efforts of the environmental professionals responsible for conducting and reviewing this ESA, the above data gaps do not constitute a data failure and are not significant enough to affect identification of recognized environmental conditions on the Property.

Section 8: Findings

Findings of the ESA have been discussed throughout the body of this report and are tabulated below.

<i>Report Section</i>		<i>REC (Y/N)</i>	<i>CREC (Y/N)</i>	<i>HREC (Y/N)</i>	<i>De Minimis Conditions (Y/N)</i>	<i>Comments</i>
2	Site Description	Y	N	N	N	Residential lot with two vacant buildings. RECs associated with ACM and LBP.
3	User-Provided Information	N	N	N	N	None
4	Records Review	N	N	N	N	None
5	Site Reconnaissance	Y	N	N	N	Two vacant residential buildings on the Property. RECs associated with ACM and LBP.
6	Interviews	N	N	N	N	No known environmental contamination or liens

As indicated above, this assessment has revealed RECs in connection with the Property. RECs associated with ACM and LBP are identified for the Property based on the following:

- Age of the buildings and the potential for presence of ACMs and/or LBP;
- Unknown condition of structural materials potentially containing ACMs and/or LBP; and
- Undetermined future use of the existing structures on the Property.

For ACM, should renovation and/or demolition activities be undertaken, then it is recommended that an Asbestos Demolition/Renovation Survey be completed and that all ACM that will be impacted by the demolition and/or renovation be properly abated to comply with federal and state regulations.

For LBP, it is recommended that any area to be disturbed be checked prior to disturbance to be in compliance with Nevada lead regulation requirements.

Section 9: Conclusion

Broadbent has conducted this ESA in conformance with the scope and limitations of ASTM Practice E1527-13 for the Property located at 0 Riverside Dr., APN: 010-590-02, Reno, NV. Exceptions to, or deviations from, this practice are described in Section 1.4 of this report.

This assessment has revealed recognized environmental conditions in connection with the Property. RECs associated with ACM and LBP are identified for the Property based on the following:

- Age of the buildings and the potential for presence of ACMs and/or LBP;
- Unknown condition of structural materials potentially containing ACMs and/or LBP; and
- Undetermined future use of the existing structures on the Property

For ACM, should renovation and/or demolition activities be undertaken, then it is recommended that an Asbestos Demolition/Renovation Survey be completed and that all ACM that will be impacted by the demolition and/or renovation be properly abated to comply with federal and state regulations.

For LBP, it is recommended that any area to be disturbed be checked prior to disturbance to be in compliance with Nevada lead regulation requirements.

Section 10: Limitations & Exceptions of Assessment

Broadbent prepared this report for the City of Reno. This ESA is based on review of the site description, User-provided information, readily ascertainable environmental records, and results of site reconnaissance and interviews. This ESA was conducted in accordance with generally accepted environmental practices and procedures, as of the date of the report. Reputable environmental professionals practicing in this or similar localities conducted the services employing a degree of care and skill ordinarily exercised under similar circumstances. Findings and conclusions were made using methodologies employed per ASTM International Practice E1527-13 described by ASTM International as representing good commercial and customary practice for conducting an ESA of a property for the purpose of identifying RECs. No other warranties are implied or expressed.

No environmental sampling and associated analyses were undertaken for this ESA report. It is possible that variations in conditions could exist beyond points explored in this investigation.

This report represents professional opinion and judgment, which are dependent upon information obtained during the performance of consulting services. Environmental conditions may exist at the Property that cannot be identified. Conclusions are based, in part, on information supplied by others, the accuracy or sufficiency of which may not be independently reviewed. No investigation can be thorough enough to exclude the presence of hazardous materials at a given site; therefore, if no hazardous materials are identified during an assessment, such a finding should not be construed as a guarantee of the absence of such materials on a property, but rather the results of services conducted within project scope, cost, and other real limitations.

Opinions presented apply to conditions existing at the time services were conducted. Broadbent is unable to report on, or accurately predict events that may impact the Property following performance of the described services, whether occurring naturally or caused by the actions of others. Broadbent assumes no responsibility for conditions it is not authorized to investigate or conditions not generally recognized as environmentally unacceptable at the time services are conducted. Broadbent is not responsible for change in applicable environmental standards, practices, laws, or regulations following performance of services.

Section 11: Certification Statement & Signatures

As required by 40 CFR Part 312.21(d), I declare that, to the best of my professional knowledge and belief, I meet the definition of an Environmental Professional as defined in §312.10 of this part. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject Property. I have developed and conducted the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312. My qualifications as an Environmental Professional are presented within Appendix F.

BROADBENT & ASSOCIATES, INC.

Signature:



Name: Brandon Reiff

Title: Senior Geologist

Date: April 3, 2019

Registration No.: 2300

State of: NV

Section 12: References

American Society for Testing and Materials, 6 November 2013. Designation E1527-13: Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

Environmental Data Resources, 14 December 2018. The EDR Aerial Photo Decade Package: City of Reno Brownfields, 0 Riverside Dr., Reno, NV 89503 (Inquiry # 5512658.27).

Environmental Data Resources, 17 December 2018. The EDR-City Directory Abstract: City of Reno Brownfields, 0 Riverside Dr., Reno, NV 89503 (Inquiry # 5512658.23).

Environmental Data Resources, 14 December 2018. The EDR Radius Map Report with GeoCheck: City of Reno Brownfields, 0 Riverside Dr., Reno, NV 89503 (Inquiry # 5512658.20s).

Environmental Data Resources, 14 December 2018. Certified Sanborn Map Report: City of Reno Brownfields, 0 Riverside Dr., Reno, NV 89503 (Inquiry # 5512658.21).

Environmental Data Resources, 14 December 2018. EDR Historical Topographic Map Report: City of Reno Brownfields, 0 Riverside Dr., Reno, NV 89503 (Inquiry # 5512658.22).

FIGURES



IMAGE SOURCE: Google Earth

