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# PHASE I ENVIRONMENTAL SITE ASSESSMENT

**Proposed NRHA Headquarters  
680 Hot Springs Road  
(APN 002-052-12)  
Carson City  
Nevada**

*Contract DEP17-026  
Task Number M06-18*

*State of Nevada  
Department of Conservation & Natural Resources  
Division of Environmental Protection  
Attn: Ellery Stahler, Brownfields Program Coordinator  
901 South Stewart Street, Suite 4001  
Carson City, Nevada 89701*

*On behalf of:  
Nevada Rural Housing Authority*

*November 15, 2017*

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# EXECUTIVE SUMMARY

*This report presents the findings of a Phase I Environmental Site Assessment (ESA) performed on the residential property addressed at 680 Hot Springs Road, Carson City, Nevada, and hereafter referred to as the Subject Property. McGinley and Associates, Inc. (MGA) conducted this investigation for the purpose of identifying recognized environmental conditions (RECs), historical recognized environmental conditions (HRECs), and/or controlled recognized environmental conditions (CRECs) on the property in accordance with the 2013 ASTM International standard practice for the performance of Phase I Environmental Site Assessments (ASTM E 1527-13). The U.S. Environmental Protection Agency (EPA) has endorsed this practice as satisfying the requirements of All Appropriate Inquiry (AAI).*

*The Subject Property is located in the SE ¼ of the SW ¼ of Section 05 and the SE ¼ of the SE ¼ of Section 11, Township 15 North, Range 20 East, of the Mount Diablo Baseline and Meridian. The Subject Property is comprised of approximately 1.97 acres of land and consists of a single-family residence, landscaped areas and undeveloped land. The single family residence is located within the center of the Subject Property and is approximately 1,065 square feet in size. No unusual observations were made within the residential structure. The exterior of the residence included landscaped areas and undeveloped land. Several piles of soil/rock were observed within the undeveloped portions of the property. The soil piles appeared to be associated with typical yardwork performed onsite. No evidence of dumped petroleum products or hazardous materials was observed during site reconnaissance. What appeared to be a groundwater well casing and an onsite septic system were observed within the undeveloped portions of the Subject Property and near the southeastern corner of the onsite residence. A representative of the property indicated the groundwater well had not been in use since the late 1990s. The onsite septic system was observed near the northeastern corner of the onsite residence. The property is accessed from the east via Hot Springs Road.*

## Findings

### **General Findings**

- *The Subject Property is comprised of 1.97 acres of land and consists of a single-family residence, landscaped areas and undeveloped land. The onsite building is approximately 1,065 square feet in size and was originally constructed in 1959.*
- *Evidence of a groundwater well casing was observed on the Subject Property proximal to the residential structure. No information pertaining to the well was found in State of Nevada records. The well will require proper closure and abandonment in accordance with State of Nevada Division of Water Resources regulations.*
- *Evidence of a septic tank system was observed proximal to the residential structure near the northeastern corner. Carson City Assessor records indicate that a septic system was installed in 1959 when the structure was built.*
- *No regulatory sites associated with the Subject Property were identified in the EDR report.*
- *The following regulatory listings were identified within the Approximate Minimum Search Distances in the databases searched by EDR: one RCRA small quantity generator (SQG) site, one RCRA conditionally exempt small quantity generator (CESQG) site, 22 Nevada State Hazardous Waste (SHWS) sites, one NV leaking underground storage tank (LUST) site, one Nevada underground storage tank (UST) site, three Nevada solid waste recycling (SWRCY) facilities, two RCRA Non-Generator No-Longer-Regulated (NonGen/NLR) sites, one PA Manifest site, and one historical dry cleaner site.*

- *None of the identified regulatory sites appear to be of environmental concern to the Subject Property at this time.*

***Historical Recognized Environmental Conditions (HREC)***

*No historical recognized environmental conditions were found for the Subject Property.*

***Controlled Recognized Environmental Conditions (CREC)***

*No controlled recognized environmental conditions were found for the Subject Property.*

***Recognized Environmental Conditions (REC)***

*No recognized environmental conditions were found for the Subject Property.*

***Conclusions***

*MGA has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 of the property addressed at 680 Hot Springs Road in Carson City, Nevada, the property. Any exceptions to, or deletions from, this practice are described in Section 7 of this report.*

*Upon conclusion of our Phase I ESA, and based on the information reviewed, this assessment has revealed no evidence of recognized environmental conditions or controlled recognized environmental conditions in connection with the Subject Property.*

*Based on the information reviewed for this assessment, MGA is of the opinion that no additional investigations at the Subject Property are warranted at this time.*

# 1. INTRODUCTION

## 1.1 Purpose

This report presents the findings of a Phase I Environmental Site Assessment (ESA) performed on the residential property addressed at 680 Hot Springs Road, Carson City, Nevada, and hereafter referred to as the Subject Property. McGinley and Associates, Inc. (MGA) conducted this investigation for the purpose of identifying recognized environmental conditions (RECs), historical recognized environmental conditions (HRECs), and/or controlled recognized environmental conditions (CRECs) on the property in accordance with the 2013 ASTM International standard practice for the performance of Phase I Environmental Site Assessments (ASTM E 1527-13). The U.S. Environmental Protection Agency (EPA) has endorsed this practice as satisfying the requirements of All Appropriate Inquiry (AAI).

## 1.2 Site Location

The Subject Property is located in the SE ¼ of the SW ¼ of Section 05 and the SE ¼ of the SE ¼ of Section 11, Township 15 North, Range 20 East, of the Mount Diablo Baseline and Meridian. A parcel map from the Carson City Assessor's Office, which depicts the Subject Property parcel, is provided herein as Appendix A. The location of the site and the property boundary are displayed in Figures 1 and 2.

## 1.3 User Responsibilities

In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "Brownfields Amendments"), the User must complete an AAI compliant user questionnaire and provide it to the environmental professional. Failure to complete this user questionnaire could result in a determination that "all appropriate inquiry" is not complete. The questionnaire determines a baseline of User knowledge of the Subject Property regarding the following items:

1. Environmental cleanup liens that are filed or recorded against the site (40 CFR 312.25);
2. Activity and land use limitations that are in place on the site or have been filed or recorded in a registry (40 CFR 312.26);
3. Specialized knowledge or experience of the person seeking to qualify for the LLP related to the property or nearby properties (40 CFR 312.28);
4. Relationship of the purchase price to the fair market value of the property if it were not contaminated (40 CFR 312.29);
5. Commonly known or reasonably ascertainable information about the property (40 CFR 312.30); and
6. The degree of obviousness of the presence or likely presence of contamination in, on, or at the property, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).

In order to obtain this information, an AAI compliant user questionnaire was provided to the User of this Phase I ESA. The completed user questionnaire can be found in Appendix B.

## 1.4 Conditions of Contract

MGA performed this work for the Nevada Division of Environmental Protection (NDEP) on behalf of the Nevada Rural Housing Authority (NRHA) (User) as part of the State of Nevada Brownfields Program (NBP) pursuant to Scope of Work outlined within our proposal dated October 24 2017 and agreed upon through a Scope of Work Approval task letter dated October 24, 2017.

## 1.5 Scope of Work

The scope of work performed and procedures utilized included the following tasks:

- **Site reconnaissance** of the Subject Property and observation of adjoining properties and vicinity by a qualified person under the direct supervision of an MGA Certified Environmental Manager;
- **Environmental setting review** to determine potential pathways for the migration of contaminants including solids and liquids at the surface or subsurface, and vapor in the subsurface;
- **Review of site history/land use** through city directory listings, historical aerial photographs, historical topographic maps, local jurisdiction records, and personal interviews/questionnaires;
- **Review of regulatory agency records** to identify and assess any listings of regulatory permits, registrations, or enforcement actions at the subject site, adjoining properties, or proximal sites (if necessary), through both a commercial database search and agency inquiries; and,
- **Preparation of this report** that describes all work performed and presents a discussion of the findings and conclusions.

## 2. SITE RECONNAISSANCE

### 2.1 Methodology

For the purpose of assessing current site conditions, a visit to the Subject Property and surrounding area was conducted on October 31, 2017 under sunny and warm conditions. During the site visit, observations were made in regards to *recognized environmental conditions (RECs)*. As defined by ASTM E 1527-13, a REC is the presence, or likely presence, of any hazardous substances or petroleum products in, on, or at the property due to any release to the environment, under conditions indicative of a release to the environment, or under conditions that pose a material threat of a future release to the environment. The term REC is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and which generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Photographs taken during the site reconnaissance are provided in Appendix C.

### 2.2 Observations During Reconnaissance

The entire site was walked and observed for the presence of RECs. The following is a list of some of the items of interest that were looked for during the site visit. If the item was not observed, it will be noted as “Not Observed”. If the item was observed during the site visit, it will be noted as “**Observed**” and a short description of the finding will follow.

- |  |                 |
|--|-----------------|
| • Staining or discoloration of soil and/or pavement  | Not Observed    |
| • Wastewater systems, septic systems, sumps, and/or seeps<br><i>The concrete typically associated with a septic system was observed near the northeastern corner of the residential structure.</i> | <b>Observed</b> |
| • Wells<br><i>Evidence of a possible well was observed near the southeastern corner of the residential structure.</i>  | <b>Observed</b> |
| • Patched areas of asphalt or concrete   | Not Observed    |
| • Standing surface water, ponds, farm tanks, etc.  | Not Observed    |
| • Railroad spurs   | Not Observed    |
| • Suspect PCB containing equipment<br><i>One pole-mounted electrical transformer was observed on the Subject Property near the western property boundary.</i>                                      | <b>Observed</b> |
| • Hydraulic equipment  | Not Observed    |
| • Underground storage tank (UST) systems/Vent Pipes  | Not Observed    |
| • Above ground storage tanks (ASTs), drums, or totes   | Not Observed    |

• Unidentified containers	Not Observed
• Sand-oil separators or grease interceptors	Not Observed
• Paint booths, spray rigs, etc.	Not Observed
• Unorthodox heating and ventilation systems	Not Observed
• Emergency generators	Not Observed
• Petroleum products, chemical/waste generation and/or storage	Not Observed
• Unusual odors	Not Observed
• Dumping (including solid waste), disturbed soils, direct burial activity, or unnatural fill areas <i>Several piles of soil/rock were observed within the undeveloped portions of the property. The soil piles appeared to be associated with typical residential yardwork performed onsite.</i>	<b>Observed</b>
• Floor drains	Not Observed
• Air quality control equipment, air emissions, or smoke stacks	Not Observed
• Industrial or manufacturing activities	Not Observed
• Stressed vegetation	Not Observed
• Oil or gas well exploration or refinery activities	Not Observed
• Surface water contamination	Not Observed
• Farm waste, feed lot spoils, or manure stockpile	Not Observed
• Prolonged use, misapplication or storage of pesticides	Not Observed
• Discharges, or run-off of potential contaminants from off-site sources	Not Observed
• Basements and/or subsurface vaults	Not Observed

## 2.3 Site Description and Current Usage

The Subject Property is comprised of approximately 1.97 acres of land and consists of a single-family residence, landscaped areas and undeveloped land. The property is accessed from the east via Hot Springs Road. Utilities supplied to the Subject Property consist of electric power

(NV Energy), natural gas (Southwest Gas), sewer (septic system), and water (City of Carson City).

The single family residence is located within the center of the Subject Property and is approximately 1,065 square feet in size. At the time of the site visit, the interior of the residence consisted of typical residential areas including: two bedrooms, a kitchen, living areas, and a garage. Two wall furnaces were observed near the bedrooms and in the living room area of the residence. The current tenant indicated the home utilizes natural gas. No unusual observations were made regarding the interior of the home. At the time of the site visit, the garage interior was not observed. However, based on the known use of the building as a dwelling, this is not considered a significant limitation that would preclude the identification of REC's in connection with the Subject Property.

At the time of the site visit, the exterior of the residence included landscaped areas and undeveloped land. The landscaped areas are located on the eastern portion of the Subject Property and the undeveloped portions of the property are located north, south and west of the onsite residence. Several piles of soil/rock were observed within the undeveloped portions of the property. The soil piles appeared to be associated with typical yardwork performed onsite. No evidence of dumped petroleum products or hazardous materials was observed during site reconnaissance. What appeared to be a groundwater well casing and an onsite septic system were observed within the undeveloped portions of the Subject Property and near the southeastern corner of the onsite residence. A representative of the property indicated the groundwater well had not been in use since the late 1990s. The onsite septic system was observed near the northeastern corner of the onsite residence.

## 2.4 Adjoining Properties

The Subject Property is bordered by the following:

North:	Pine Lane with the Carson Catalina Apartment Complex beyond.
South:	Residential properties
East:	Quickstop Gas Station and the Sierra Springs Apartment Complex
West:	Residential properties

At the time of the site visit, the properties immediately surrounding the Subject Property consisted primarily of commercial properties. With the exception of the Quickstop Gas Station, reconnaissance of the publicly accessible portions of the properties located immediately adjoining the Subject Property, revealed no visible evidence of environmental concerns that could potentially impact the Subject Property.

## 2.5 PCB Sources

Polychlorinated biphenyl (PCB) is a man-made chemical known to have potential harmful effects on human health and the environment. Federal law banned U.S. production of PCBs as of July 2, 1979. However, PCB-containing materials may still be present in electrical equipment manufactured prior to 1979. Because the onsite residential dwelling was reportedly constructed in 1959, the presence of PCB-containing equipment at the site cannot be ruled out. A pole-mounted electrical transformer was observed on the western boundary of the Subject Property. The observed transformers appeared to be in fair condition with no observed leaks. Furthermore, NV Energy has indicated that they no longer use PCB-containing oils in their

transformers and make every effort to remove PCB-containing transformers and replace them with environmentally safer equipment.

### **3. ENVIRONMENTAL SETTING**

#### **3.1 Regional Physiographic Setting**

The Subject Property is located within the Basin and Range Physiographic Province at an elevation of approximately 4,715 feet above mean sea level. The climate of the region is described as Mid-Latitude Steppe, which is characterized by cold winters, hot summers, and semi-arid precipitation conditions (Houghton et. al., 1975). Historical average minimum and maximum annual temperatures for the area, as recorded at the nearest climate station in Carson City, Nevada, are 33.9 and 66.1 degrees Fahrenheit, respectively, while historical annual precipitation averages 10.3 inches (Western Regional Climate Center, 2016).

#### **3.2 Geologic Conditions**

The geology underlying the Subject Property has been mapped as Quaternary Older alluvial-plain deposits. The unit is described as moderately sorted, sandy small cobble gravel, slightly gravelly sand and sandy coarse silt (Trexler, 1977). The surficial soils found at the Subject Property have been mapped as Urban Land which does not have a reported hydrologic group. As the site is mainly covered with soil, the nearest soil component is to the east and is mapped as Dalzell fine sandy loam. This soil is classified as hydrologic soil group C, which is characterized by slow infiltration rates with high runoff potential when thoroughly wet and water transmission through the soil is somewhat restricted (NRCS, 2016).

#### **3.3 Surface Water Conditions**

There are no surface water bodies such as streams or wetlands located on the Subject Property. The nearest major surface water body to the Subject Property is the Carson River, which is located approximately 2.90 miles east-southeast of the Subject Property.

According to the Federal Emergency Management Agency (FEMA), the site is listed as being within Zone X and having a 0.2 percent annual chance flood hazard.

#### **3.4 Groundwater Conditions**

Based on evidence observed during the site visit, a domestic well appears to exist on the Subject Property. However, a review of the Nevada Division of Water Resources (NDWR) Well Log Database did not locate a well for the Subject Property. It should be noted that historical well records are not always reliable as addresses and parcel numbers are sometimes not labeled on the well logger report.

Groundwater flow direction at the Subject Property is estimated to be generally towards the east based on recent (2016) groundwater monitoring conducted by MGA at a site located approximately one-half mile to the southwest. The depth to groundwater is estimated to be approximately eight to 15 feet below ground surface, based the same groundwater monitoring data as well as a review of well logs associated with wells located in the vicinity of the Subject Property.

## 4. SITE HISTORY AND HISTORICAL LAND USE

A historical assessment of the Subject Property was performed through a search and review of historical aerial photographs, historical topographic maps, available Sanborn fire insurance maps, available city directory records, and county records. The purpose of the historical assessment was to identify previous land uses that may have impacted the Subject Property in the past. A summary of our historical assessment is presented below.

### 4.1 Historical Aerial Photographs

Environmental Data Resources, Inc. (EDR) provided aerial photographs covering the area of the Subject Property for the years: 1939, 1954, 1959, 1962, 1966, 1972, 1974, 1980, 1984, 1994, 1999, 2006 and 2010. Aerial photographs for years other than these or the most current were not reviewed. A review of the aerial photos appears to indicate that the original residential home first observed in the 1959 photo is the same as the structure observed on site at the time of the site visit. In general, the area surrounding the Subject Property in the 1959 photo is undeveloped. What appears to be an apartment complex is observed adjacent to the west and south of the Subject Property in the 1962 photo. Additional residential structures are seen in the vicinity of the Subject Property between 1972 and 1980 and an additional apartment complex is observed adjacent to the north in the 1980 photo. Development across Hot Springs Road to the east is not observed in photos until the 1999 aerial where additional residential homes are visible. Commercial property to the west is visible in the 2006 photo and the Subject Property and the surrounding areas appear similar to current conditions in the 2010 photo. A copy of the historical aerial photograph report that was reviewed is provided in Appendix D.

### 4.2 Historical Topographic Maps

Historical topographic maps were provided by EDR covering the area of the Subject Property for the years: 1891, 1893, 1956, 1968, 1974, 1982, and 2014. Topographic maps for years other than these were not reviewed. The review of these topographic maps did not reveal any apparent land uses that may have impacted the Subject Property in the past. A copy of the historical topographic map report that was reviewed is provided in Appendix D.

### 4.3 Sanborn Fire Insurance Maps

A Sanborn Map Report for the Subject Property was provided by EDR. Sanborn fire insurance maps provide detailed historical information about the site and its surrounding properties. According to EDR, the Subject Property lies in an area that is not mapped and is considered an “Unmapped Property”. A copy of the EDR Sanborn Map Report that was reviewed is provided in Appendix E.

### 4.4 City Directory Listings

At the request of MGA, EDR searched City Directory listings for Hot Springs Rd. and N. Roop St. City directory listings as published by Polk’s City Directory or those found in EDR’s digital archive were searched for the years: 1964, 1969, 1974, 1979, 1984, 1988, 1992, 1995, 2000, 2005, 2010, 2014. The Subject Property address was only listed in the 2000 and 2014 listing. Other listed addresses are mainly associated with residential listings as well as some commercial businesses in the area. One listing, Capital Cleaners, appears to be addressed at an adjacent property on Hot Springs Rd. (712 Hot Springs). However, that address is associated with an apartment complex and it appears that the business address is associated with the home

address of the owner. No evidence of onsite cleaning services was found. A copy of the EDR city directory report that was reviewed is provided in Appendix E.

#### **4.5 Carson City Assessor's Office**

According to the Carson City Assessor's Office, the Subject Property is identified as APN 002-052-12 and addressed as 680 Hot Springs Rd. According to the records reviewed, the parcel is 1.97 acres in size and currently has a land use code of 200 – *Single Family Residence*. The zoning code for the parcel is listed as *MFA – Multi-family Apartments*. The original construction date of the 1,065 square-foot residential structure is listed as 1959. The current property owner is listed as Bypass Properties, LLC, which has owned the property since 1999. The only previous property owner listed is the Adrien C Walsh Family Trust who obtained the property in 1988 from Sylvia Crowell-Stoddard. Ownership information prior to 1988 was not provided in the information available for review.

#### **4.6 User Provided Information**

No previous environmental reports associated with the Subject Property were provided by the User or are known to exist.

## 5. RECORDS REVIEW

As defined in ASTM E 1527-13, a *historical recognized environmental condition* is a past release of any hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (to current regulatory standards) or meets unrestricted residential use criteria established by a regulatory authority, without subjecting the property to institutional controls or engineering controls. A HREC will not be considered a REC per ASTM E 1527-13. To the contrary, a *controlled recognized environmental condition* is a REC that has been addressed to the satisfaction of the applicable regulatory authority with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (i.e., property use restrictions, activity use limitations, institutional/engineering controls, etc.).

A regulatory agency review was conducted through both a commercial database search and local agency inquiries. The purpose of this regulatory agency review was to ascertain if regulatory actions have ever been imposed on the Subject Property, adjoining properties, or on properties within the search radius guidelines established by the 2013 ASTM Standard Practice for Environmental Site Assessments.

### 5.1 EDR Radius Map Report

At the request of MGA, EDR provided records from federal, state, and local environmental databases for regulatory sites located within the *Approximate Minimum Search Distances* as specified in ASTM E 1527-13. A copy of the EDR report is included herein as Appendix F. Included within the report are summaries of the regulatory databases reviewed, a listing of sites identified within the search radius, detailed data on the identified sites, and maps showing the locations of facilities reported to have had regulatory action. MGA reviewed and evaluated all of the sites in the EDR report.

According to the databases searched by EDR, no regulatory sites associated with the Subject Property were identified in the EDR report. In addition, the following regulatory listings were identified within the *Approximate Minimum Search Distances* in the databases searched by EDR: one RCRA small quantity generator (SQG) site, one RCRA conditionally exempt small quantity generator (CESQG) site, 22 Nevada State Hazardous Waste (SHWS) sites, one NV leaking underground storage tank (LUST) site, one Nevada underground storage tank (UST) site, three Nevada solid waste recycling (SWRCY) facilities, two RCRA Non-Generator No-Longer-Regulated (NonGen/NLR) sites, one PA Manifest site, and one historical dry cleaner site.

Of the sites identified in the EDR Radius Map Report, two were researched further. The other sites were not researched further because they are considered unlikely to have caused environmental impacts to the Subject Property in the past, because they appear to be located far from the Subject Property, are at locations that are considered likely to be hydrologically downgradient from, or cross-gradient to, the Subject Property, have had no reported releases, have had no reported violations of hazardous waste regulations, and/or have received regulatory closure.

The EDR database search also identified a number of sites that could not be mapped due to insufficient address information. MGA reviewed all of these sites and has determined that each are located far from the Subject Property, are at locations that are considered likely to be hydrologically downgradient from, or cross-gradient to, the Subject Property, have had no reported releases, have had no reported violations of hazardous waste regulations, and/or have

received regulatory closure. For this reason, the unmapped sites are considered unlikely to cause, or to have caused in the past, environmental impact to the Subject Property.

## 5.2 Nevada Division of Environmental Protection (NDEP)

The regulatory agency review did not identify any regulatory sites administered by the NDEP Bureau of Corrective Actions (BCA) that could potentially impact the Subject Property. Therefore, no agency files from the NDEP BCA were requested for review. The gasoline station located across Hot Springs Rd. to the east is identified as Facility ID #1-000179. According to State of Nevada Petroleum Fund records, the gas station is currently enrolled with the Petroleum Fund with an expiration date of September 30, 2018. The station utilizes a 15,000 gallon gasoline UST and a 12,000 gallon gasoline UST. The tanks were installed in 2002 and are constructed of double-walled fiberglass reinforced plastic.

## 5.3 Carson City Environmental Control Division

On November 6, 2017, an inquiry regarding inspections, complaints, spills or other potential environmental issues in connection with the Subject Property and/or its adjoining properties was submitted via electronic mail to Mr. Ken Peck with Carson City Environmental Control Department. On November 6, 2017, Mr. Peck replied by email indicating that his office does not have any files pertaining to the Subject Property. He did indicate that the adjacent gas station had a sand/oil interceptor (750 gallons) and a grease interceptor (750 gallons) in use and the permit for the facility was in good standing and no violations have occurred. He also suggested that the Carson City Environmental Health Department be contacted regarding the well and septic system discovered on the Subject Property. On November 6, 2017, MGA staff contacted the department regarding these two systems and no known complaints, spills, or issues were known for the Subject Property.

## 5.4 EDR Vapor Encroachment Screen

MGA conducted a Vapor Encroachment Screen (VES) investigation in accordance with the 2015 ASTM Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions (ASTM E 2600-15). The VES investigation used available information and professional judgment to derive our conclusions. The goal of the VES is to identify the potential for vapors from hazardous substances and petroleum releases to reach the Subject Property. ASTM E2600-15 defines the term, vapor encroachment condition (VEC) as the presence or likely presence of chemical of concern (COC) vapors in the vadose zone of the Subject Property caused by the release of vapors from contaminated soil and/or groundwater either on or near the Subject Property as identified by Tier 1 or Tier 2 procedures. MGA performed a VES for the area encompassing the Subject Property by reviewing each of the regulatory sites that were provided by EDR within a 1/3-mile primary search radius from the boundary of the Subject Property.

### 5.4.1 Tier 1 Screening

Initially, seven sites were identified by EDR within the 1/3-mile primary search radius surrounding the Subject Property. Of these initial seven sites, five were immediately excluded because they were determined to be outside the area of concern for vapor migration based on distance and estimated hydrologic gradient and/or were not identified as a *standard environmental record per* ASTM. MGA reviewed both of the remaining sites to evaluate their potential to create a vapor encroachment condition. Both of the sites were determined to have limited potential for the presence of contaminants of concern (COC); were determined to be outside the area of concern based on distance, gradient, and the type of COC; and/or were

determined to be beyond the critical distance for vapor migration to the Subject Property. Therefore, a VEC does not exist. A copy of the VES report is included herein as Appendix G.

## 6. FINDINGS

### 6.1 General Findings

- The Subject Property is comprised of 1.97 acres of land and consists of a single-family residence, landscaped areas and undeveloped land. The onsite building is approximately 1,065 square feet in size and was originally constructed in 1959.
- Evidence of a groundwater well casing was observed on the Subject Property proximal to the residential structure. No information pertaining to the well was found in State of Nevada records. The well will require proper closure and abandonment in accordance with State of Nevada Division of Water Resources regulations.
- Evidence of a septic tank system was observed proximal to the residential structure near the northeastern corner. Carson City Assessor records indicate that a septic system was installed in 1959 when the structure was built.
- No regulatory sites associated with the Subject Property were identified in the EDR report.
- The following regulatory listings were identified within the Approximate Minimum Search Distances in the databases searched by EDR: one RCRA small quantity generator (SQG) site, one RCRA conditionally exempt small quantity generator (CESQG) site, 22 Nevada State Hazardous Waste (SHWS) sites, one NV leaking underground storage tank (LUST) site, one Nevada underground storage tank (UST) site, three Nevada solid waste recycling (SWRCY) facilities, two RCRA Non-Generator No-Longer-Regulated (NonGen/NLR) sites, one PA Manifest site, and one historical dry cleaner site.
- None of the identified regulatory sites appear to be of environmental concern to the Subject Property at this time.

### 6.2 Historical Recognized Environmental Conditions

*No historical recognized environmental conditions* were found for the Subject Property.

### 6.3 Controlled Recognized Environmental Conditions

*No controlled recognized environmental conditions* were found for the Subject Property.

### 6.4 Recognized Environmental Conditions

*No recognized environmental conditions* were found for the Subject Property.

### 6.5 Conclusions

MGA has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 of the property addressed at 680 Hot Springs Road in Carson City, Nevada, the property. Any exceptions to, or deletions from, this practice are described in Section 7 of this report.

Upon conclusion of our Phase I ESA, and based on the information reviewed, this assessment has revealed no evidence of recognized environmental conditions or controlled recognized environmental conditions in connection with the Subject Property.

Based on the information reviewed for this assessment, MGA is of the opinion that no additional investigations at the Subject Property are warranted at this time.



## 7. LIMITATIONS

### 7.1 General

The conclusions and recommendations presented above are based upon the agreed scope of work outlined in the above report. McGinley and Associates, Inc. makes no warranties or guarantees as to the accuracy or completeness of information obtained from others. It is possible that information exists beyond the scope of this investigation. Additional information, which is not available to McGinley and Associates, Inc. at the time of writing the report, may result in a modification of the conclusions and recommendations presented. The services performed by McGinley and Associates, Inc. have been conducted in a manner consistent with the level of care ordinarily exercised by members of our profession currently practicing under similar conditions. This report is not a legal opinion, but may under certain circumstances be prepared at the direction of counsel, may be in anticipation of litigation, and may be classified as an attorney-client communication or as an attorney work product.

This report has been prepared for the sole use of the addressee(s) of this report, and cannot be released without consent from McGinley & Associates Inc. If a third party relies on the information provided in this report, McGinley and Associates, Inc. accepts no responsibility for damages suffered by the third party as a result of reliance of information contained in this report, and that nothing contained in this report shall create a contractual relationship or cause the third party to bring suit against McGinley & Associates, Inc.

### 7.2 Data Gaps

The following data gaps were encountered during the course of this Phase I ESA:

- Historical information found for the Subject Property may have exceeded five-year intervals. This data gap is not considered significant as specific use of the property and adjoining properties appears unchanged during the period of time that exceeded five years.
- Past owners were not available within reasonable time and/or cost constraints for interview for this report. However, based on information obtained from EDR and Carson City records, this data gap is not considered significant since it is likely all information obtained would be duplicative of information obtained from other sources.

## 8. SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

We certify that, to the best of our knowledge and belief, this Phase I ESA has been prepared and reviewed under the guidance of MGA staff meeting the definition of Environmental Professionals (EP), as defined in 40 CFR§312.10(b). MGA EPs have specific qualifications based on education, training, and experience to assess a property of this nature, history, and setting. MGA has developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312. Resumes of the environmental professionals utilized in performance of this Phase I ESA are attached in Appendix H.

Respectfully Submitted:

**McGinley and Associates, Inc.**



Kandis Tuttle  
Environmental Scientist

**Reviewed by:**

*I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession, and to the best of my knowledge, comply with all applicable federal, state and local statutes, regulations and ordinances.*



Brett Bottenberg, P.E., C.E.M. #1690, Exp. 10/07/2019  
Project Manager

## 9. REFERENCES

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ASTM Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions, ASTM E 2600-15.

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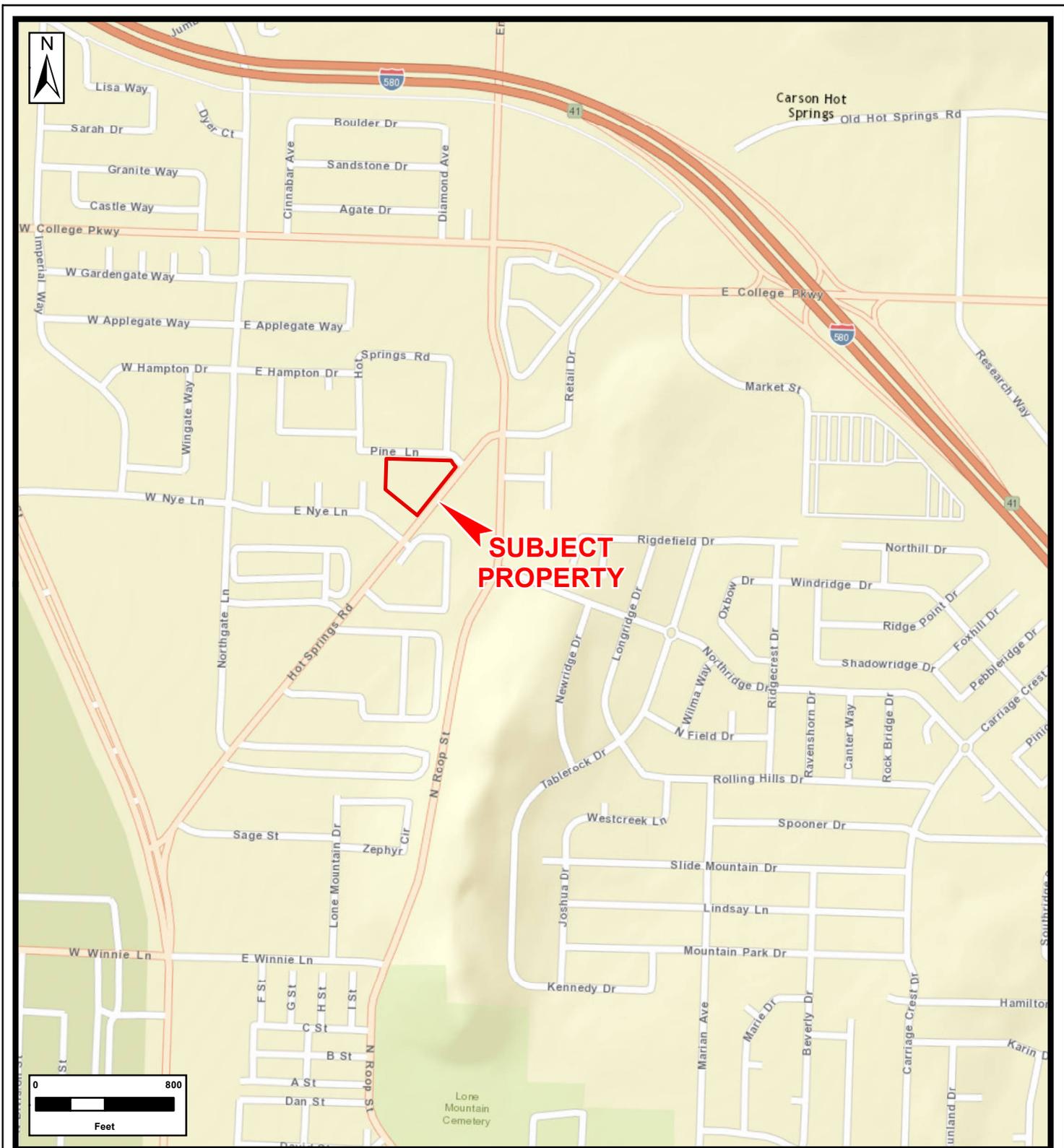
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**FIGURE 1**

TITLE:  
**PROJECT LOCATION MAP  
 -SHOWING-  
 PROPOSED NRHA  
 HEADQUARTERS  
 680 HOT SPRINGS RD  
 CARSON CITY, NV 89706**

JOB NO.:  
**BRN046**

DATE:  
**11/6/2017**



FILE:  
**Fig 1 - Project Location Map**

COORDINATE SYSTEM:  
**NAD 1983 UTM Zone 11N**

REF.	DESIGNED	BB	CHECKED	BB	REVISION: -
	DRAWN	HC	APPROVED	BB	



**Legend**

Subject Property



**FIGURE 2**

TITLE:  
**SITE MAP  
 -SHOWING-  
 PROPOSED NRHA  
 HEADQUARTERS  
 680 HOT SPRINGS RD  
 CARSON CITY, NV 89706**

JOB NO.: **BRN046**      DATE: **11/6/2017**



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FILE:  
**Fig 2 - Site Map**

COORDINATE SYSTEM:  
**NAD 1983 UTM Zone 11N**

REF.	DESIGNED	BB	CHECKED	BB	REVISION: -
	DRAWN	HC	APPROVED	BB	