DRAFT
Remedial Action Plan

SIERRA REFLECTIONS SUBDIVSION
Washoe County, NV

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and

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DRAFT

Remedial Action Plan for:

Sierra Reflections Subdivision

Washoe County, Nevada

September 2025

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NNPH Environmental Health Supervisor: _____
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1.0 INTRODUCTION

On behalf of World Properties Inc., UES Professional Solutions 30, LLC (UES) has prepared this Draft Remedial Action Plan (RAP) for the Sierra Reflections Subdivision (Site) located in Washoe County, to address a portion of the project which contains elevated concentrations of mercury within the soil above residential and commercial action levels. The RAP will be finalized during the Final Map submission process to include the final grading plans. The location of the Site is indicated in **Figure 1**. Note that while concentrations of arsenic exceeding regulatory action levels were found on the Site, they are within background ranges for the region and therefore not considered in this RAP. A summary of recent mercury characterization activities conducted at the Site in March 2025 is also provided herein. Comments from Northern Nevada Public Heath (NNPH), received on June 18, 2025, were incorporated into this RAP.

2.0 BACKGROUND

2.1 SITE DESCRIPTION

The Site is comprised of approximately 760 acres of agricultural land, grazing pastures, and vacant, vegetated land traversed by Steamboat Creek, Browns Creek, and unimproved roadways. The Site is identified as Washoe County Assessor Parcel Numbers (APNs) 046-080-40, 046-090-09, 046-090-01, 046-060-45, 046-090-10, 046-090-04, 046-060-47, 046-090-11, 046-090-05, 046-060-55 046-090-12, 046-090-06, 046-100-02, 046-090-13, 046-090-07, 046-100-03, 046-090-14, 046-090-08, 046-100-04, 046-090-15, 046-090-18, 046-100-07, 046-090-16, 046-090-23, 046-100-10, 046-090-17, 046-090-24, 046-090-25, and 046-090-26. The Site is planned for development as a common open space residential subdivision called Sierra Reflections.

2.2 SITE HISTORY

Prior to the 1900s, historical gold milling activities occurred on the Site and the Virginia and Truckee Railroad traversed along Steamboat Creek. The Site appeared to be utilized for agricultural and ranching operations since at least the 1930s with various ranching and rural residential structures previously located on the Site. By 2017, all structures appeared to be removed from the Site with the exception of an existing trailer and well house located in the northeastern portion. UES understands that the majority of the low-lying land in the meadow area has been flood irrigated utilizing water from Steamboat Creek which is known to be impacted with mercury from historical mining and milling activities. Additionally, portions of the site including Steamboat Creek and the former mill location are located within the Carson River Mercury Superfund Site (CRMS). The boundaries of the CRMS in relation to the Site are depicted in **Figure 2**.

2.3 PREVIOUS INVESTIGATIONS/REGULATORY INVOLVEMENT

2.3.1 Carson River Mercury Superfund Site (CRMS)

During the late 1800s, Comstock Lode gold and silver mills in the Carson River and Steamboat Creek watersheds resulted in contamination to nearby soils and drainages. An estimated 14 million pounds of elemental mercury, which was used to extract precious metals from ore through operations utilizing the Washoe amalgamation process, were released to the environment. The Washoe amalgamation process

was developed in the 1860s. Large, circular iron tanks or "pans" with mechanical agitators held crushed ore, which was mixed with water, mercury, salt, and copper sulfate, then heated and agitated. The valuable part of the ore (precious metals) would then amalgamate in the mercury and subsequently be removed. The mercury would then be boiled away leaving the precious metals. The Washoe process resulted in mercury contamination proximal to and hydrologically downgradient from the mill sites. After around 1900, cyanide leaching and flotation processes replaced mercury amalgamation. The milling process may also have concentrated arsenic in the processed materials (tailings). The historical mills that impacted Steamboat Creek were located on Galena Creek and in Washoe City, near Washoe Lake and on Steamboat Creek downstream of Washoe Lake. Fluvial transport of the mercury and arsenic is the primary means by which the metals were mobilized in Steamboat Creek. Based on previous studies in Washoe County, mercury and arsenic impacted material is co-located and generally contained in the stream channel of Steamboat Creek, but long-term flood-irrigation with water from Steamboat Creek and flood events in the areas surrounding Steamboat Creek are known to have deposited mercury and arsenic impacted sediment outside of the stream channel.

With EPA oversight, several local agencies have conducted studies to determine the extent of contamination and evaluate the human health and ecological risks from the mercury contamination associated with the CRMS. These investigations have found that historic releases of mercury have impacted: sediments and adjacent floodplains of the Carson River from New Empire downstream through Lahontan Reservoir and extending to the Stillwater National Wildlife Refuge; soils and sediments in Virginia City, Gold Hill, and Gold, Sixmile, Sevenmile, and Daney Canyons; soils and sediments associated with mill sites in and around Washoe and Little Washoe Lakes and Steamboat Creek; and aquatic and semi-aquatic species living in or near the impacted water bodies. The EPA listed the CRMS on the Superfund National Priorities List in August 1990.

The EPA draft Carson River Mercury Superfund Site map dated March 6, 2018, and the NDEP Carson River Mercury Superfund Site Risk Area Boundaries map dated January 19, 2012, both depict the Site as located within Operable Unit 1 (OU-1) of the CRMS. The CRMS Locations of Risk Area Boundaries map dated April 20, 2011, identifies the Site as potentially containing high level risk zones associated with Steamboat Creek and the Temelic Mill Site which is mapped on the northeastern portion of the Site as indicated in **Figure 2**. In addition to the areas shown to be in the CRMS, areas that were historically flood-irrigated and/or within the 100-year flood plain could reasonably be expected to be impacted. Based on aerial photographs reviewed during a Phase I Environmental Site Assessment (ESA) conducted by UES (formerly McGinley and Associates, Inc.) in January 2023, the northeast portion of the Site appears to have been flood-irrigated with water from Steamboat Creek since at least 1939.

2.3.2 1993 Steamboat Creek Erosion Study

Based on a review of the EPA CRMS Map Explorer sampling data, limited soil sampling occurred on the Site in June 1993 as part of a Steamboat Creek bank erosion study. At least twelve soil samples were collected from the Site during this sampling event and detectable concentrations of mercury were reported in four of the collected samples ranging from 9.68 milligrams per kilograms (mg/kg) to 117.49 mg/kg. Soil samples appeared to be collected between six inches and three feet below ground surface (bgs) from the banks of Steamboat Creek.

2.3.3 2023 Phase I ESA

In January 2023, UES conducted a Phase I ESA for the Site. The Phase I ESA was conducted to identify any recognized environmental conditions (REC), controlled recognized environmental conditions, or historical recognized environmental conditions associated with the Site. The following REC was identified:

- *The Site is located within the boundaries of the CRMS which includes mercury contamination associated with the legacy gold mining and milling era of the late 1800s. Mercury contamination is known to exist in soils at mill sites, such as the former Temelic Mill Site which is located on the Site, and in nearby waterways and drainages, including the Steamboat Creek and land irrigated with Steamboat Creek water, which are present on the Site. Concentrations of mercury exceeding the CRMS action level of 80 mg/kg have been reported in the Site soils up to 117 mg/kg during a limited soil investigation conducted in 1993. Additional contamination of the Site related to the CRMS cannot be ruled out*.

2.3.4 2023 Screening Level Soil Sampling

In April and May 2023, UES conducted a screening level soil sampling event at the Site to provide baseline knowledge of existing site conditions to evaluate decisions for future development and/or sampling activities. During the screening level sampling, 43 soil samples were collected from locations of suspected mercury impacts including Steamboat Creek, flood irrigated land, and the former mill site. Additionally, two background soil samples were collected from locations topographically upgradient of Steamboat Creek where mercury impacts were not anticipated. Detectable mercury concentrations were reported in all of the collected samples ranging from 0.079 mg/kg to 116 mg/kg. Thirty of the 43 samples were reported above the EPA Regional Screening Level (RSL) of 7.1 mg/kg for residential soil and six samples were reported above the EPA RSL of 30 mg/kg for industrial soils. A summary of the sample results is provided in Table 1. These samples were located in the flood irrigated areas in the northeastern portion of the Site and in the vicinity of Steamboat Creek as depicted in **Figure 3**.

2.3.5 2024 Site Characterization Soil Sampling

Between January and March 2024, soil sampling activities were conducted by UES to characterize and delineate mercury, lead, and arsenic impacts at the Site prior to approval of development plans in compliance with Northern Nevada Public Health (NNPH) policy.

The Site was divided into three zones as differing levels of impacts were expected based on location, historical use, and potential for flooding and/or flood irrigation. The zones are depicted in **Figure 4**. Zone 1 was located within the northeastern portion of the Site and is characterized by low-lying meadows and agricultural grazing land along Steamboat Creek which are subject to flood events and flood irrigation which is known to deposit impacted sediments outside the creek bed. Additionally, the former Temelic Mill site is located within this zone. Zone 2 encompassed the banks of Steamboat Creek which traverses the central portion of the Site from the southwest to the northeast. Zone 3 is located along the western and eastern portions of the Site and is characterized by areas located topographically upgradient of Steamboat Creek, outside the 100-year floodplain, and with no known flood irrigation.

Characterization activities included advancing 210 borings/test pits and collecting composite soil samples from two soil horizons (0-4’ and 4-8’) in Zone 1, collecting 46 discrete soil samples from Zone 2 along Steamboat Creek, and collecting 23 discrete soil samples from Zone 3. A total of 449 samples were

collected from across the Site. Of those 449 samples, 81 exceeded the residential action level for mercury (7.1 mg/kg) and 16 exceeded the commercial action level (30 mg/kg).

Mercury analytical results for samples collected in the 0-4' horizon within the meadow (Zone 1) ranged from 0.09 mg/kg to 181 mg/kg. Of the 210 grid cells sampled in this horizon, 61 cells exceeded the residential action level (7.1 mg/kg) and only 12 grid cells exceeded the commercial action level (30 mg/kg), as indicated in **Figure 5A**. Mercury analytical results for samples collected in the 4-8' horizon within the meadow (Zone 1) ranged from 0.0225 mg/kg to 79.7 mg/kg. Of the 170 samples collected for this horizon, only six cells exceeded the residential action level (7.1 mg/kg) and only two samples exceeded the commercial action level (30 mg/kg) as indicated in **Figure 5B**. A summary of the sample results is provided in Table 2.

Mercury analytical results for samples collected from the Steamboat Creek bank (Zone 2) ranged from 0.0392 mg/kg to 311 mg/kg. This is consistent with known mercury impacts from the CRMS. While the entirety of this portion of Steamboat Creek is included in the CRMS boundaries, impacts above action levels appear limited as they are located sporadically and are not consistently present along Steamboat Creek due to the mechanisms of sedimental transport of mercury and dilution over the last 120 years. Mercury analytical results for samples collected from areas above the flood zone which were not irrigated with Steamboat Creek water (Zone 3) ranged from 0.0269 mg/kg to 1.4 mg/kg, well below the residential action level of 7.1 mg/kg. A summary of the sample results for Zone 2 and Zone 3 are provided in Tables 3 and 4 respectively. As such, Zone 2 and Zone 3 were cleared and are not included in this RAP.

A total of 82 samples were collected and analyzed for arsenic and lead. With the exception of one sample collected from the former mill site (B49), concentrations of arsenic ranged between 0.625 mg/kg and 21.5 mg/kg with an average concentration of 4.94 mg/kg, and concentrations of lead ranged between 3.89 mg/kg and 76.1 mg/kg with an average concentration of 13.0 mg/kg. These results are consistent with naturally occurring background concentrations within the region. The sample collected from the former mill site (B49) had elevated concentrations of arsenic (308 mg/kg) and lead (556 mg/kg) well above the Site average and EPA residential RSLs within the 0-4' soil horizon. Lead and arsenic are known byproducts of milling techniques. The affected area appears to be limited and will be mitigated with the same methodology as mercury impacted soils. Complete details of this investigation are provided in *Results of Mercury Characterization and Corrective Action Plan (CAP)* dated June 14, 2025.

3.0 2025 SITE CHARACTERIZATION ACTIVITES

Based on the elevated mercury concentrations observed during the 2024 mercury characterization activities, additional sampling activities were conducted to further delineate of mercury, arsenic, and lead impacts in Zone 1 at the Site prior to preparing tentative maps and this RAP. The additional sampling activities were conducted in general accordance with the SAP prepared by UES, dated November 22, 2023.

3.1 CHARACTERIZATION ACTIVITIES

The additional characterization activities conducted at the Site consisted of advancing 29 borings in Zone 1, collecting composite soil samples from one soil horizon (0-4') in each boring, analytical testing of the collected soil samples, and preparing this summary of findings. Characterization activities were conducted in March 2025. Methods for drilling and sampling were consistent with the SAP and the subsequent report. Soil boring locations are indicated in **Figure 5A.**

3.2 ANALYTICAL TESTING AND RESULTS

Soil samples were shipped to Pace Analytical National (Pace) of Mount Juliet, Tennessee for analytical testing. All soil samples were analyzed for mercury using EPA Method SW7471 with the exception of samples collected from borings B238 and B239, which were analyzed for lead and arsenic by EPA Method 6010D. Copies of the chain of custody records and analytical laboratory reports for the soil samples have been provided under separate cover and can be provided upon request.

Analytical results for the collected soil samples are included in Table 5. Detectable concentrations of mercury were reported in 25 of the 29 samples collected, with concentrations ranging from 0.109 mg/kg (B234) to 56.0 mg/kg (B225). Of the 29 samples collected, 11 exceed the residential action level for mercury (7.1 mg/kg) and two exceed the commercial action level for mercury (30 mg/kg). The two samples analyzed for arsenic and lead reported concentrations of arsenic above the industrial action level of 3.0 mg/kg but within background ranges and concentrations of lead below the residential action level of 200 mg/kg. The additional site characterization sampling event achieved complete delineation of the impacted areas.

4.0 CONCEPTUAL SITE MODEL

The mercury, arsenic, and lead impacted soil at the Site is related to legacy gold milling activities from the historic Comstock Lode mining era. Processing of the ore at Comstock's gold mills generally involved comminution of the ore with stamp mills, creating a slurry, and adding mercury to form an amalgam with the gold and silver. The gold and silver were later separated from the mercury using a distillation process and the mercury was reused. After about 1900, cyanide leaching and flotation processes replaced mercury amalgamation. The milling process may also have concentrated arsenic and lead in the processed materials (tailings). The historical mills that impacted Steamboat Creek were located on Galena Creek and in Washoe City, near Washoe Lake. The Temelic Mill site is also located on the Site. Fluvial transport of the metals is the primary means by which the metals were mobilized in Steamboat Creek. The mercury, arsenic, and lead impacted material is co-located and generally contained in the stream channel of Steamboat Creek, but decades of flood-irrigation at the Site with water from Steamboat Creek and flood events in the area allowed mercury sediment to be deposited on the Site. As such, mercury-impacted soil or soil with elevated concentrations of arsenic and lead are not expected to exist outside of the flood-irrigated lands and/or the 100-year floodplain. Additionally, due to alluvial transport, vertical migration of mercury is limited, as mercury gets caught up in the soil particles as it moves downward. As such, elevated concentrations of mercury are not anticipated in areas where surficial samples were below action levels and overall mercury concentrations will decrease significantly with depth.

5.0 REMEDIAL ACTION LEVELS

Pursuant to direction and discussion with the Nevada Division of Environmental Protection (NDEP) and the NNPH, action levels at the Site will follow the EPA Regional Screening Levels (RSLs). The EPA RSLs for mercury, lead, and arsenic are summarized in the table below.

COCs	EPA RSL – Residential	EPA RSL – Commercial
Mercury	7.1 mg/kg	30 mg/kg

Lead	200 mg/kg	800 mg/kg
Arsenic	0.68 mg/kg	3.0 mg/kg

As indicated in UES's (formerly McGinley) September 27, 2021, *South Truckee Meadows Regional Arsenic Background Levels* report, regional background arsenic concentrations in soils appear to range from 1.8 mg/kg to 320 mg/kg. While arsenic concentrations in soil samples collected for the Sierra Reflections Subdivision appear to be elevated when compared to the EPA action level of 0.68 mg/kg for residential scenarios, these soil sample concentrations are within the known background range for arsenic within this region. In general, soil with elevated concentrations of arsenic are known to be collocated with elevated mercury concentrations in this region. Therefore, the proposed RAP for mercury impacted soils would inherently address elevated arsenic concentrations in the low-lying areas.

6.0 REMEDIAL ACTION PLAN

Remedial action will focus on protecting public health by removing and/or capping mercury impacted soils such that shallow soils do not contain mercury above the residential action level of 7.1 mg/kg and roadways do not contain mercury above the industrial/construction action level of 30 mg/kg.

In general, the RAP for this Site includes moving impacted soil from the meadow area to beneficial reuse areas which require fill as part of site grading activities. Impacted soil used as beneficial fill in other parts of the Site will be capped with a minimum of eight feet of clean material. Additionally, as a conservative measure, areas where soil was removed in Zone 1 will be capped with eight feet of clean material. This cap will prevent contact with potentially impacted soil following Site development. The remedial action site grading plans are provided in **Appendix A.** These plans outline the anticipated cut and fill locations. Exhibit EX1 outlines the anticipated extent of cut and locations for beneficial reuse (fill), exhibit EX2 indicates where the eight-foot clean cap will be applied, exhibit EX3 provides information on buried utility locations and depths, and exhibit EX4 provides cross sections for select areas of interest. As indicated in the Exhibits in Appendix A and in **Figures 5A and 5B**, impacted areas within the meadows will be excavated and capped with clean material. Additional details of the remedial action are provided in the following sections.

6.1 CLEARING AND GRUBBING

Prior to soil excavation, the impacted areas will be cleared and grubbed. Soil associated with the grubbed material in this area is assumed to be impacted. Vegetation and surface debris that is cleared and grubbed will be placed in the designated beneficial reuse areas. All grubbed material will be placed as soon as possible in order to avoid double handling. Any material that must be stored for a length of time will follow the Materials Handling Plan provided in Appendix B.

6.2 IMPACTED SOIL EXCAVATION

Prior to mass grading on the property, the areas known to be impacted will be excavated to approximately eight feet below the planned final grade to account for eight feet of clean cap as indicated in Appendix A. For ease, the entire cut area outlined in **Appendix A, EX1** will be removed and treated as impacted. Excavation boundaries were dictated by sample results and conservative lateral estimates provided in

Figure 5A and Figure 5B. Development plans dictate that utilities will be no deeper than eight feet bgs in areas that have mercury impacts above applicable action levels. As such, no additional excavation and/or sampling activities will be conducted in roadways. In the event final design places utilities greater than eight feet bgs, additional confirmation samples will be collected to total depth as outlined in Section 7.1. Based on previous sample results and mercury transport mechanisms, mercury is not anticipated to be below eight feet bgs in concentrations greater than the commercial action level (see Section 4.0). Additionally, no excavation of impacted material is planned for the Steamboat Creek exclusion area. Excavated soil will be transported to the beneficial reuse areas concurrently with excavation to prevent double handling, migration via wind, stormwater, and/or confusion regarding what soil can be placed where. All contaminated soil excavation will take place prior to beginning other grading efforts for the Site (with the exception of preparing the beneficial reuse areas), in order to keep mercury laden soil segregated from non-impacted soils.

Temporary stockpiling of impacted soil during the grading process is not anticipated; however, the minimum requirements for materials handling are provided in and will follow the Materials Handling Plan in Appendix B. Additionally, tentative stockpile locations have been identified on the erosion control plan provided in Appendix A. ***Prior to mass grading, a site-specific materials handling plan will be developed by the grading contractor and provided to the NNPH and Washoe County for review. The site-specific plan will include temporary soil staging locations, phasing plan in relation to location of work, and specific best management practices (BMP) to be followed and used to protect stockpiled soil if they differ from those outlined in Appendix B. The Site-Specific Materials Handling Plan will be submitted to the NNPH for review at least 30 days prior to commencement of site grading activities.***

6.3 Open Space Soil Disturbances

Given the proximity to Steamboat Creek (mercury source), soil within the open space and Steamboat Creek avoidance area is assumed to be contaminated. However, no specific mercury remediation and/or capping will take place within the Steamboat Creek corridor or areas designated as open spaces proximal to Steamboat Creek as this area will be subject to additional mercury deposition over time.

There will be some activity within the open space area proximal to Steamboat Creek including bridge construction and utility installation at the two identified Steamboat Creek crossings in which impacted soils will need to be handled appropriately. The current bridge design is provided in the Tentative Map submittal. Utilities will generally be advanced via jack and bore and then run above ground with the bridge over the creek crossing. Any spoils associated with bridge construction and/or utility installation will be segregated and placed into beneficial reuse areas. As this area will be subject to additional mercury deposition over time, no additional excavation outside of what is required for construction efforts will be conducted. Additionally, no capping and/or confirmation sampling will be conducted in association with these structures.

6.4 Future Drinking Water Infrastructure

Various wells and tanks are proposed to be installed in the Meadow area to support future drinking water infrastructure. Proposed locations have been provided for Washoe County and NNPH review in the tentative map submittal.

Infrastructure that will be installed in areas with mercury containing soil that has already been excavated and capped with eight feet of clean material will require no additional remedial consideration.

Infrastructure that will be installed in areas known to be impacted with mercury but not remediated will require appropriate handling of impacted soils. Locations will be reviewed with the CEM who will determine the handling requirements based on historic sampling results. Note that if infrastructure is installed prior to beneficial reuse areas being ready to receive soil and/or after they are capped, spoils associated with infrastructure installation will need to be characterized and properly disposed of offsite.

Tank locations will not require additional sampling following installation as any remaining mercury will be capped. Per discussion with the NDEP, no additional sampling will be required for well installation under this RAP or related to mercury impacted soil in the area.

6.5 Fill Placement and Site Grading

Impacted soil removed from Zone 1 of the Site will be placed in one of the beneficial reuse areas identified in **Appendix A, EX1.** As indicated in the exhibits, these areas are proposed to be open space in the development and will not contain residential housing or roadways.

Impacted soil will be placed in beneficial reuse areas as soon as reasonable following excavation to prevent migration via wind, stormwater, and/or confusion regarding what soil can be placed where. The eight-foot cap will be placed as soon as possible following the placement of impacted soil. The eight-foot cap will be placed in the Zone 1 areas where impacted soil was removed and in the beneficial reuse areas. The cap will be placed consistent with engineering and geotechnical requirements. It should be noted that the open space area that makes up the exclusion area around Steamboat Creek will not receive a clean cap. Fill material will be sourced primarily from the southeastern portion of the Site which is located topographically upgradient, outside of impacts from flood and irrigation events (Zone 3).

Some of the beneficial reuse areas will be located on slopes. Prior to placement of the cap, impacted soil will be graded to a 3:1 (or less steep) incline in areas with slopes. Specific attention will be paid to erosion control measures in these areas to ensure the cap stays in place and impacted soil is not exposed. At a minimum, a final cap of 12” to 18” of rock rip rap will be placed on slopes 3:1 or greater which represents a more conservative approach than required for county code. More specific erosion control measures such as revegetation (if appropriate) will be determined later in the planning process and will be presented in a RAP addendum if the measures change the overall approach to the beneficial reuse areas. A draft erosion control plan has been provided in Appendix A. Final erosion control plans will be approved by Washoe County Planning & Engineering through typical map review iterative processes.

Fill material in beneficial reuse areas and any capping material that has been placed will be demarcated such that it is not moved once placed.

After the impacted soil is removed, placed in a beneficial re-use area, and the clean cap is placed and demarcated, mass site grading can proceed as normal. It should be noted that the grading plans used for exhibits in Appendix A are consistent with the submittals being provided to Washoe County for development.

7.0 CONFIRMATION SAMPLING

Confirmation sampling will be conducted within the roadways and areas receiving the eight-foot clean cap to ensure that remedial action measures were successful. Confirmation samples collected from the areas receiving the eight-foot clean cap will provide confirmation that soil above the action level does not exist within the top eight feet of finished grade. The following sections outline the general approach to confirmation sampling. No other confirmation or fill material sampling is proposed as initial sampling efforts did not identify any other areas of concern. Should the design location of the roadways and utility depths differ significantly from plans submitted in this RAP, a standalone confirmation sampling plan will be submitted to the NNPH for approval.

7.1 ROADWAY SAMPLING

Confirmation sampling will be conducted in the roadways to confirm that any material that may be encountered during future maintenance activities is below commercial action levels (30 mg/kg) for mercury. There are approximately 13,000 linear feet of roadways within Zone 1 at this time.

First, in a computer mapping program, sampling locations will be laid out for all public roadways within Zone 1 which were previously identified as impacted. Sample locations will be placed 2,000 feet on center and then labeled with a unique identification. In instances where roadways are located within areas that previously exceeded commercial action levels, samples will be collected 200 feet on center.

Soil borings will be advanced utilizing a direct push drill rig to facilitate sampling efforts. Soil borings will be advanced to approximately eight feet bgs which is consistent with the deepest proposed utility. Samples will be collected as composite samples from two soil horizons: 0-4 feet bgs and 4-8 feet bgs. Samples will be collected from the drill cores from the desired interval and placed in one-gallon ziplock bags. A new bag will be utilized for each sample location. The bag will be thoroughly homogenized and then a sample aliquot will be collected in a laboratory provided sample jar. The sample jar shall be sealed with a Teflon lined lid, labeled, and stored in a chilled cooler pending shipment to the laboratory. Sample locations will be recorded with GPS coordinates for inclusion in the final report. In the event final utility depth exceeds eight feet bgs in areas with elevated mercury, additional samples will be collected at four-foot intervals or a portion thereof, to the bottom of the deepest utility. Samples will be collected consistent with the methodology described above. Should soils exceeding the commercial action level of 30 mg/kg be encountered, additional excavation will occur in that area to remove those soils from the utility right of way.

7.2 RESIDENTIAL AREA AND BENEFICIAL REUSE AREA SAMPLING

Following final grading and cap placement, confirmation samples will be collected from the areas receiving the eight-foot clean cap, to provide confirmation that soil above the residential action level (7.1 mg/kg) does not exist within the top eight feet of finished grade. A 1/4 acre grid system will be applied to the fill areas and the beneficial reuse areas using a computer mapping program. Each cell of the grid system will be given a unique identifier. A random number generator will be used to select 25% of the grid cells for sampling with at least two samples collected in each beneficial reuse area.

Soil borings will be advanced utilizing a direct push drill rig to facilitate sampling efforts. Soil borings will be advanced to four feet bgs. One boring will be advanced per cell and a sample will be collected from two

soil horizons: 0-4 feet bgs and 4-8 feet bgs. Samples will be collected from the drill cores from the desired interval and placed in one-gallon ziplock bags. A new bag will be utilized for each sample location. The bag will be thoroughly homogenized and then a sample aliquot will be collected in a laboratory provided sample jar. The sample jar shall be sealed with a Teflon lined lid, labeled, and stored in a chilled cooler pending shipment to the laboratory. Sample locations will be recorded with GPS coordinates for inclusion in the final report.

7.3 SAMPLE ANALYSIS

Soil samples will be shipped under chain-of-custody protocol to Pace Analytical in Mount Juliet, Tennessee for analytical testing. The samples will be analyzed for mercury using EPA Method SW7471.

7.4 EVALUATION OF RESULTS

Analytical data collected will be compared to the appropriate action level. Should impacts above the applicable action level be encountered, NNPH and Washoe County will be notified and a path forward for additional sampling and remedial action will be discussed.

The 95% UCL will be calculated using the data from Zone 1. The 95% UCL will be calculated using the Student's-t methodology and equation.

$$UCL = \bar{X} + t_n x \left(\frac{S_{\bar{x}}}{\sqrt{n}}\right)$$

Where:

$\bar{X} = arithmetic\ mean\ of\ all\ samples$

$t_n = Student's - t\ distribution\ number\ for\ 95\%\ based\ on\ sample\ quantiy\ n$

$n = number\ of\ samples$

$S_{\bar{x}} = standard\ deviation\ of\ all\ samples$

In the event of a "non-detect" result, for calculation purposes, the result will be considered one half of the reporting limit. The values including a "J" flag (i.e., estimated value above the method detection limit but below the reporting limit) will be used within calculations as-is. The 95% UCL will be calculated for each sampling group (i.e., roadways, capped areas, etc.) The final calculated 95% UCL (mercury concentration) shall be representative of conditions in Zone 1.

8.0 NNPH NOTIFICATION AND ADDITIONAL PLAN SUBMITTAL

At least one month prior to beginning grading activities, a Site-Specific Materials Handling Plan will be provided to NNPH for review. The site-specific plan will include temporary soil staging locations, phasing plan in relation to location of work, and specific best management practices (BMP) to be followed and used to protect stockpiled soil if they differ from those outlined in Appendix B. The intent of this plan is to provide specific details on soil movement and management that cannot be determined prior to selecting a contractor for development.

In addition to the site-specific plan, the NNPH shall be notified at the following times during soil remedial activities:

1. 48 hours prior to commencing excavation activities
2. During placement and construction of beneficial re-use areas
    a. Following placement of impacted soils
    b. Following placement of drainage/channel bank rip rap
    c. Following placement of erosion control
3. Following placement of the eight-foot clean material cap
4. 48 hours prior to confirmation sample collection
5. Following receipt of analytical data if results exceed applicable action levels.

Notifications shall be made in writing via email to Wesley Rubio at wrubio@nnph.gov or as requested by NNPH.

9.0 REPORT PREPARATION

Following completion of the remedial and soil sampling activities, UES will prepare a Remedial Action Report for submittal to the NNPH. The report will include a description of remedial activities, final disposition locations of contaminated soil, confirmation soil sampling protocols and results, analytical laboratory reports and chain-of-custody documentation, and any other relevant information/documents.

Additionally, a request for No Further Action will also be submitted with the report. UES anticipates this report will be submitted to NNPH within 45 days following completion of grading, remedial, and sampling activities.

10.0 ADDITIONAL GENERAL REQUIREMENTS

10.1 Environmental Remediation Bond

A bond shall be provided by the project developer to Washoe County. The intent of this bond is to provide assurance to Washoe County that remediation activities shall be completed in full. The bond amount shall be based on a cost estimate for the excavation and transport of mercury impacted soils, placement of said materials, slope stabilization and capping of said soil. This bond shall be submitted to Washoe County in accordance with standard procedures. The bond shall be released in full following review and approval of soil placement, capping, and slope stabilization of the beneficial reuse fill areas and once NNPH has confirmed the requirements of the approved RAP have been satisfied.

10.2 Irrevocable Easements for Beneficial Reuse Areas

Irrevocable non-build easements shall be established for the areas used for beneficial reuse. The format for said easements will be approved by Washoe County. The easements shall be recorded by the Washoe County Recorders office and will be accompanied by a Record of Survey depicting the non-build easements. The easements will include environmental covenant language indicating that environmental

assessment and planning will be required for any future earthwork being conducted below eight feet bgs (i.e., below the clean cap), in those areas. The final recording of the easements shall be completed prior to the issuance of the building permit.

11.0 LIMITATIONS

The conclusions presented herein are partially based on information provided by UES. UES makes no warranties or guarantees as to the accuracy or completeness of information provided or compiled by others. The results reported herein are applicable to the time the sampling occurred. Changes in site hydrogeology may occur as a result of rainfall, snowmelt, water usage, or other factors.

It should be recognized that definition and evaluation of environmental conditions is a difficult and inexact science. Judgments and opinions leading to conclusions and recommendations are generally made with an incomplete knowledge of the conditions present. More extensive studies, including additional environmental investigations, can tend to reduce the inherent uncertainties associated with such studies. Additional information not found or available to UES at the time of writing this report may result in a modification to the conclusions and recommendations contained herein.

The presentation of data presented herein is intended for the purpose of the visualization of environmental conditions. A greater degree of spatial and temporal data density may result in a more accurate representation of environmental conditions. Although such data visualization techniques may aid in providing a conceptual understanding of environmental conditions, such presentations are not intended to completely depict environmental conditions.

The use of the word "certify" in this document constitutes an expression of professional opinion regarding those facts or findings which are the subject of the certification and does not constitute a warranty or guarantee, either expressed or implied.

This report is not a legal opinion. The services performed by UES have been conducted in a manner consistent with the level of care ordinarily exercised by members of our profession currently practicing under similar conditions. No other warranty, express or implied, is made.

12.0 CLOSING

UES and World Properties Inc. trust the information provided herein satisfies the requirements of the NNPH at this time. Should you have any questions regarding this report, please contact the undersigned at (775) 829-2245.

Respectfully submitted,
UES

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.

Caitlin Jelle, P.E., C.E.M #2454, (Exp. 3/26)
Director, Due Diligence and Remediation

TABLES

Table 1. Summary of Analytical Results - Screening Level Sampling			
Sample Location	**Sample ID**	**Date**	**Mercury (mg/kg)**
S1	KKC012-S1@6"	4/7/2023	0.255
S2	KKC012-S2@6"	4/7/2023	**115**
S3	KKC012-S3@6"	4/7/2023	**13.0**
S4	KKC012-S4@6"	4/7/2023	0.466
S5	KKC012-S5@6"	4/7/2023	**11.6**
S6	KKC012-S6@6"	4/7/2023	**9.4**
S7	KKC012-S7@6"	4/7/2023	**19.6**
S8	KKC012-S8@6"	4/7/2023	**35.5**
S9	KKC012-S9@6"	4/7/2023	**7.7**
S10	KKC012-S10@6"	4/7/2023	**9.7**
S11	KKC012-S11@6"	4/7/2023	**20.6**
S12	KKC012-S12@6"	4/7/2023	**116**
S13	KKC012-S13@6"	4/7/2023	**12.1**
S14	KKC012-S14@6"	4/7/2023	**25.5**
S15	KKC012-S15@6"	4/7/2023	**20.1**
S16	KKC012-S16@6"	4/7/2023	**71.9**
S17	KKC012-S17@6"	4/7/2023	**99.2**
S18	KKC012-S18@6"	4/7/2023	6.49
S19	KKC012-S19@6"	4/7/2023	6.77
S20	KKC012-S20@6"	4/7/2023	1.62
S21	KKC012-S21@6"	4/7/2023	**33.4**
S22	KKC012-S22@6"	4/7/2023	**8.6**
S23	KKC012-S23@6"	4/7/2023	**10.6**
S24	KKC012-S24@6"	4/7/2023	**11.1**
S25	KKC012-S25@6"	4/7/2023	6.83
S26	KKC012-S26@6"	4/7/2023	2.06
S27	KKC012-S27@6"	4/7/2023	2.53
S28	KKC012-S28@6"	4/7/2023	4.67
S29	KKC012-S29@6"	4/7/2023	5.3
S30	KKC012-S30@6"	4/7/2023	**13.9**
BG1	KKC012-BG1@6"	4/7/2023	3.0
BG2	KKC012-BG2@6"	4/7/2023	0.0790
EPA RSL (Commercial)			**30**
EPA RSL (Residential)			**7.1**

mg/kg miligrams per kilogram

Table 2. Summary of Analytical Results - Zone 1						
Sample Location	Sample ID	Date	Depth	Metals (mg/kg)		
				Mercury	Arsenic	Lead
B2	KKC012-Z1-B2@0-4'	1-Feb-24	0-4'	0.377	21.5	69
	KKC012-Z1-B2@4-8'	1-Feb-24	4-8'	<0.0186	1.01 J	5.28
B3	KKC012-Z1-B3@0-4'	1-Feb-24	0-4'	0.132	NA	NA
	KKC012-Z1-B3@4-8'	1-Feb-24	4-8'	<0.0183	NA	NA
B4	KKC012-Z1-B4@0-4'	1-Feb-24	0-4'	0.794	NA	NA
	KKC012-Z1-B4@4-8'	1-Feb-24	4-8'	0.0232 J	NA	NA
B5	KKC012-Z1-B5@0-4'	1-Feb-24	0-4'	**11.00**	NA	NA
	KKC012-Z1-B5@4-8'	1-Feb-24	4-8'	0.900	NA	NA
B6	KKC012-Z1-B6@0-4'	1-Feb-24	0-4'	3.77	2.99	13
	KKC012-Z1-B6@4-8'	1-Feb-24	4-8'	0.0862	<0.211	4.54
B7	KKC012-Z1-B7@0-4'	1-Feb-24	0-4'	1.98	NA	NA
	KKC012-Z1-B7@4-8'	1-Feb-24	4-8'	0.178	NA	NA
B8	KKC012-Z1-B8@0-4'	1-Feb-24	0-4'	1.85	8.62	9.77
	KKC012-Z1-B8@4-8'	1-Feb-24	4-8'	0.541	6.29	6.59
B9	KKC012-Z1-B9@0-4'	1-Feb-24	0-4'	1.10	NA	NA
	KKC012-Z1-B9@4-8'	1-Feb-24	4-8'	0.176	NA	NA
B10	KKC012-Z1-B10@0-4'	1-Feb-24	0-4'	0.556	NA	NA
	KKC012-Z1-B10@4-8'	1-Feb-24	4-8'	0.182	NA	NA
B11	KKC012-Z1-B11@0-4'	1-Feb-24	0-4'	1.02	9.53	18.4
	KKC012-Z1-B11@4-8'	1-Feb-24	4-8'	0.0732	6.03	5.78
B12	KKC012-Z1-B12@0-4'	1-Feb-24	0-4'	2.38	NA	NA
	KKC012-Z1-B12@4-8'	1-Feb-24	4-8'	0.218	NA	NA
B13	KKC012-Z1-B13@0-4'	1-Feb-24	0-4'	2.99	NA	NA
	KKC012-Z1-B13@4-8'	1-Feb-24	4-8'	0.154	NA	NA
B15	KKC012-Z1-B15@0-4'	22-Jan-24	0-4'	2.45	NA	NA
	KKC012-Z1-B15@4-8'	22-Jan-24	4-8'	0.241	NA	NA
B16	KKC012-Z1-B16@0-4'	22-Jan-24	0-4'	1.17	NA	NA
	KKC012-Z1-B16@4-8'	22-Jan-24	4-8'	0.0542	NA	NA
B17	KKC012-Z1-B17@0-4'	22-Jan-24	0-4'	3.73	NA	NA
	KKC012-Z1-B17@4-8'	22-Jan-24	4-8'	0.238	NA	NA
B18	KKC012-Z1-B18@0-4'	22-Jan-24	0-4'	1.18	NA	NA
	KKC012-Z1-B18@4-8'	22-Jan-24	4-8'	<0.0216	NA	NA
B19	KKC012-Z1-B19@0-4'	22-Jan-24	0-4'	3.86	NA	NA
	KKC012-Z1-B19@4-8'	22-Jan-24	4-8'	0.495	NA	NA
B20	KKC012-Z1-B20@0-4'	22-Jan-24	0-4'	1.14	NA	NA
	KKC012-Z1-B20@4-8'	22-Jan-24	4-8'	0.129	NA	NA
B21	KKC012-Z1-B21@0-4'	22-Jan-24	0-4'	4.11	NA	NA
	KKC012-Z1-B21@4-8'	22-Jan-24	4-8'	6.64	NA	NA
B24	KKC012-Z1-B24@0-4'	1-Feb-24	0-4'	6.96	NA	NA
	KKC012-Z1-B24@4-8'	1-Feb-24	4-8'	0.35	NA	NA
B25	KKC012-Z1-B25@0-4'	1-Feb-24	0-4'	0.927	NA	NA
	KKC012-Z1-B25@4-8'	1-Feb-24	4-8'	4.81	NA	NA
B26	KKC012-Z1-B26@0-4'	1-Feb-24	0-4'	3.0	NA	NA
	KKC012-Z1-B26@4-8'	1-Feb-24	4-8'	0.148	NA	NA

Table 2. Summary of Analytical Results - Zone 1						
Sample Location	Sample ID	Date	Depth	Metals (mg/kg)		
				Mercury	Arsenic	Lead
B27	KKC012-Z1-B27@0-4'	1-Feb-24	0-4'	1.83	9.45	13.6
	KKC012-Z1-B27@4-8'	1-Feb-24	4-8'	0.176	5.4	5.73
B28	KKC012-Z1-B28@0-4'	1-Feb-24	0-4'	2.55	NA	NA
	KKC012-Z1-B28@4-8'	1-Feb-24	4-8'	0.353	NA	NA
B29	KKC012-Z1-B29@0-4'	1-Feb-24	0-4'	**11.4**	NA	NA
	KKC012-Z1-B29@4-8'	1-Feb-24	4-8'	0.115	NA	NA
B30	KKC012-Z1-B30@0-4'	29-Jan-24	0-4'	**64.3**	NA	NA
	KKC012-Z1-B30@4-8'	29-Jan-24	4-8'	4.17	NA	NA
B31	KKC012-Z1-B31@0-4'	29-Jan-24	0-4'	3.51	NA	NA
	KKC012-Z1-B31@4-8'	29-Jan-24	4-8'	0.178	NA	NA
B32	KKC012-Z1-B32@0-4'	29-Jan-24	0-4'	0.638	3.48	15.7
	KKC012-Z1-B32@4-8'	29-Jan-24	4-8'	0.101	2.37	6.16
B33	KKC012-Z1-B33@0-4'	29-Jan-24	0-4'	0.969	NA	NA
	KKC012-Z1-B33@4-8'	29-Jan-24	4-8'	0.294	NA	NA
B34	KKC012-Z1-B34@0-4'	1-Feb-24	0-4'	0.246	NA	NA
	KKC012-Z1-B34@4-8'	1-Feb-24	4-8'	0.199	NA	NA
B35	KKC012-Z1-B35@0-4'	1-Feb-24	0-4'	0.040 J	NA	NA
	KKC012-Z1-B35@4-8'	1-Feb-24	4-8'	<0.0186	NA	NA
B36	KKC012-Z1-B36@0-4'	1-Feb-24	0-4'	0.157	5.27	6.61
	KKC012-Z1-B36@4-8'	1-Feb-24	4-8'	0.0995	3.83	5.5
B37	KKC012-Z1-B37@0-4'	29-Jan-24	0-4'	4.62	NA	NA
	KKC012-Z1-B37@4-8'	29-Jan-24	4-8'	0.0261 J	NA	NA
B38	KKC012-Z1-B38@0-4'	29-Jan-24	0-4'	**12.9**	4.54	28.4
	KKC012-Z1-B38@4-8'	29-Jan-24	4-8'	0.386 J6	2.49	4.86
B39	KKC012-Z1-B39@0-4'	29-Jan-24	0-4'	**7.32**	NA	NA
	KKC012-Z1-B39@4-8'	29-Jan-24	4-8'	1.51	NA	NA
B40	KKC012-Z1-B40@0-4'	29-Jan-24	0-4'	**39.1**	NA	NA
	KKC012-Z1-B40@4-8'	29-Jan-24	4-8'	**7.93**	NA	NA
B41	KKC012-Z1-B41@0-4'	29-Jan-24	0-4'	**13.6**	5.61	31
	KKC012-Z1-B41@4-8'	29-Jan-24	4-8'	0.969	2.04 J	5.05
B42	KKC012-Z1-B42@0-4'	29-Jan-24	0-4'	**32.6**	NA	NA
	KKC012-Z1-B42@4-8'	29-Jan-24	4-8'	3.64	NA	NA
B43	KKC012-Z1-B43@0-4'	29-Jan-24	0-4'	**53.9**	NA	NA
	KKC012-Z1-B43@4-8'	29-Jan-24	4-8'	1.81	NA	NA
B44	KKC012-Z1-B44@0-4'	29-Jan-24	0-4'	**16.2**	NA	NA
	KKC012-Z1-B44@4-8'	29-Jan-24	4-8'	0.134	NA	NA
B45	KKC012-Z1-B45@0-4'	29-Jan-24	0-4'	**17**	NA	NA
	KKC012-Z1-B45@4-8'	29-Jan-24	4-8'	0.482	NA	NA
B46	KKC012-Z1-B46@0-4'	1-Feb-24	0-4'	1.54	NA	NA
	KKC012-Z1-B46@4-8'	1-Feb-24	4-8'	**7.63**	NA	NA
B47	KKC012-Z1-B47@0-4'	22-Jan-24	0-4'	**20.1**	NA	NA
	KKC012-Z1-B47@4-8'	22-Jan-24	4-8'	1.17	NA	NA
B48	KKC012-Z1-B48@0-4'	22-Jan-24	0-4'	0.15	NA	NA
	KKC012-Z1-B48@4-8'	22-Jan-24	4-8'	0.192	NA	NA

Table 2. Summary of Analytical Results - Zone 1						
Sample Location	Sample ID	Date	Depth	Metals (mg/kg)		
				Mercury	Arsenic	Lead
B49	KKC012-Z1-B49@0-4'	22-Jan-24	0-4'	0.979	**308 J3 J5**	**556 J3 V**
	KKC012-Z1-B49@4-8'	22-Jan-24	4-8'	0.0292 J	2.85	7.59
B50	KKC012-Z1-B50@0-4'	22-Jan-24	0-4'	**8.45**	NA	NA
	KKC012-Z1-B50@4-8'	22-Jan-24	4-8'	0.51	NA	NA
B51	KKC012-Z1-B51@0-4'	22-Jan-24	0-4'	**12.5**	NA	NA
	KKC012-Z1-B51@4-8'	22-Jan-24	4-8'	0.283	NA	NA
B52	KKC012-Z1-B52@0-4'	22-Jan-24	0-4'	**10**	4.86	26.4
	KKC012-Z1-B52@4-8'	22-Jan-24	4-8'	0.111 B	1.26 J	5.68
B53	KKC012-Z1-B52@0-4'	22-Jan-24	0-4'	**10.7**	NA	NA
	KKC012-Z1-B52@4-8'	22-Jan-24	4-8'	0.108 B	NA	NA
B54	KKC012-Z1-B54@0-4'	22-Jan-24	0-4'	6.29	NA	NA
	KKC012-Z1-B54@4-8'	22-Jan-24	4-8'	0.274	NA	NA
B55	KKC012-Z1-B55@0-4'	22-Jan-24	0-4'	**11.2**	NA	NA
	KKC012-Z1-B55@4-8'	22-Jan-24	4-8'	0.526	NA	NA
B56	KKC012-Z1-B56@0-4'	22-Jan-24	0-4'	6	NA	NA
	KKC012-Z1-B56@4-8'	22-Jan-24	4-8'	0.766	NA	NA
B57	KKC012-Z1-B57@0-4'	29-Jan-24	0-4'	**10.1**	NA	NA
	KKC012-Z1-B57@4-8'	29-Jan-24	4-8'	0.17	NA	NA
B58	KKC012-Z1-B58@0-4'	29-Jan-24	0-4'	2.03	NA	NA
	KKC012-Z1-B58@4-8'	29-Jan-24	4-8'	1.41	NA	NA
B59	KKC012-Z1-B59@0-4'	29-Jan-24	0-4'	2.91	NA	NA
	KKC012-Z1-B59@4-8'	29-Jan-24	4-8'	0.129	NA	NA
B60	KKC012-Z1-B60@0-4'	29-Jan-24	0-4'	**37.6**	4.98	76.1
	KKC012-Z1-B60@4-8'	29-Jan-24	4-8'	0.636	1.34 J	3.96
B61	KKC012-Z1-B61@0-4'	29-Jan-24	0-4'	**45.4**	NA	NA
	KKC012-Z1-B61@4-8'	29-Jan-24	4-8'	**55.9**	NA	NA
B62	KKC012-Z1-B62@0-4'	29-Jan-24	0-4'	**181**	3.87	59.9
	KKC012-Z1-B62@4-8'	29-Jan-24	4-8'	0.342	1.42 J	3.89
B63	KKC012-Z1-B63@0-4'	1-Feb-24	0-4'	**12.3**	NA	NA
	KKC012-Z1-B63@4-8'	NS	4-8'	Refusal - No Sample		
B64	KKC012-Z1-B64@0-4'	29-Jan-24	0-4'	6.26	NA	NA
	KKC012-Z1-B64@4-8'	NS	4-8'	Refusal - No Sample		
B65	KKC012-Z1-B65@0-4'	1-Feb-24	0-4'	5.27	NA	NA
	KKC012-Z1-B65@4-8'	1-Feb-24	4-8'	0.114	NA	NA
B66	KKC012-Z1-B66@0-4'	1-Feb-24	0-4'	2.3	<0.546	10.8
	KKC012-Z1-B66@4-8'	1-Feb-24	4-8'	0.158	3.26	5.63
B67	KKC012-Z1-B67@0-4'	22-Mar-24	0-4'	**13.6**	NA	NA
	KKC012-Z1-B67@4-8'	NS	4-8'	Refusal - No Sample		
B68	KKC012-Z1-B68@0-4'	22-Mar-24	0-4'	5.27	NA	NA
	KKC012-Z1-B68@4-8'	NS	4-8'	Refusal - No Sample		
B69	KKC012-Z1-B69@0-4'	1-Feb-24	0-4'	0.491	NA	NA
	KKC012-Z1-B69@4-8'	1-Feb-24	4-8'	0.12	NA	NA
B70	KKC012-Z1-B70@0-4'	1-Feb-24	0-4'	<0.0187	NA	NA
	KKC012-Z1-B70@4-8'	1-Feb-24	4-8'	0.115	NA	NA

Table 2. Summary of Analytical Results - Zone 1						
Sample Location	Sample ID	Date	Depth	Metals (mg/kg)		
				Mercury	Arsenic	Lead
B71	KKC012-Z1-B71@0-4'	22-Mar-24	0-4'	**7.47**	NA	NA
	KKC012-Z1-B71@4-8'	NS	4-8'	Refusal - No Sample		
B72	KKC012-Z1-B72@0-4'	22-Mar-24	0-4'	**10**	2.34	24.1
	KKC012-Z1-B72@4-8'	NS	4-8'	Refusal - No Sample		
B73	KKC012-Z1-B73@0-4'	22-Mar-24	0-4'	1.79	NA	NA
	KKC012-Z1-B73@4-8'	NS	4-8'	Refusal - No Sample		
B74	KKC012-Z1-B74@0-4'	1-Feb-24	0-4'	4	NA	NA
	KKC012-Z1-B74@4-8'	1-Feb-24	4-8'	0.487	NA	NA
B75	KKC012-Z1-B75@0-4'	1-Feb-24	0-4'	1.59	NA	NA
	KKC012-Z1-B75@4-8'	1-Feb-24	4-8'	1.3	NA	NA
B76	KKC012-Z1-B76@0-4'	1-Feb-24	0-4'	**11.2**	6.86	18.7
	KKC012-Z1-B76@4-8'	1-Feb-24	4-8'	0.131	0.732	4.91
B77	KKC012-Z1-B77@0-4'	1-Feb-24	0-4'	**11.8**	NA	NA
	KKC012-Z1-B77@4-8'	1-Feb-24	4-8'	0.169	NA	NA
B78	KKC012-Z1-B78@0-4'	29-Jan-24	0-4'	4.35	NA	NA
	KKC012-Z1-B78@4-8'	29-Jan-24	4-8'	**22.3**	NA	NA
B79	KKC012-Z1-B79@0-4'	29-Jan-24	0-4'	**17.3**	NA	NA
	KKC012-Z1-B79@4-8'	29-Jan-24	4-8'	1.64	NA	NA
B80	KKC012-Z1-B80@0-4'	29-Jan-24	0-4'	**43.7**	NA	NA
	KKC012-Z1-B80@4-8'	29-Jan-24	4-8'	0.104	NA	NA
B81	KKC012-Z1-B81@0-4'	29-Jan-24	0-4'	4.61	NA	NA
	KKC012-Z1-B81@4-8'	29-Jan-24	4-8'	1.64	NA	NA
B82	KKC012-Z1-B82@0-4'	29-Jan-24	0-4'	0.76	3.32	7.91
	KKC012-Z1-B82@4-8'	29-Jan-24	4-8'	<0.0199	3.59	4.29
B83	KKC012-Z1-B83@0-4'	29-Jan-24	0-4'	<0.0221	NA	NA
	KKC012-Z1-B83@4-8'	29-Jan-24	4-8'	0.974	NA	NA
B84	KKC012-Z1-B84@0-4'	29-Jan-24	0-4'	6.59	2.98	12.2
	KKC012-Z1-B84@4-8'	29-Jan-24	4-8'	0.0936 J	1.27	5.25
B85	KKC012-Z1-B85@0-4'	29-Jan-24	0-4'	2.72	NA	NA
	KKC012-Z1-B85@4-8'	29-Jan-24	4-8'	0.0497	NA	NA
B86	KKC012-Z1-B86@0-4'	29-Jan-24	0-4'	**11.8**	NA	NA
	KKC012-Z1-B86@4-8'	29-Jan-24	4-8'	2.6	NA	NA
B87	KKC012-Z1-B87@0-4'	30-Jan-24	0-4'	1.07	NA	NA
	KKC012-Z1-B87@4-8'	30-Jan-24	4-8'	0.446	NA	NA
B88	KKC012-Z1-B88@0-4'	30-Jan-24	0-4'	4.73	4.53	12.8
	KKC012-Z1-B88@4-8'	30-Jan-24	4-8'	0.654	3.87	8.02
B89	KKC012-Z1-B89@0-4'	30-Jan-24	0-4'	<0.0217	NA	NA
	KKC012-Z1-B89@4-8'	30-Jan-24	4-8'	0.0722	NA	NA
B90	KKC012-Z1-B90@0-4'	30-Jan-24	0-4'	0.0236 J	NA	NA
	KKC012-Z1-B90@4-8'	30-Jan-24	4-8'	<0.0223	NA	NA
B91	KKC012-Z1-B91@0-4'	30-Jan-24	0-4'	0.105	NA	NA
	KKC012-Z1-B91@4-8'	30-Jan-24	4-8'	0.0357 J	NA	NA
B92	KKC012-Z1-B92@0-4'	30-Jan-24	0-4'	4.29	NA	NA
	KKC012-Z1-B92@4-8'	30-Jan-24	4-8'	0.0339 J	NA	NA

Table 2. Summary of Analytical Results - Zone 1						
Sample Location	Sample ID	Date	Depth	Metals (mg/kg)		
				Mercury	Arsenic	Lead
B93	KKC012-Z1-B93@0-4'	30-Jan-24	0-4'	0.193	NA	NA
	KKC012-Z1-B93@4-8'	30-Jan-24	4-8'	0.522	NA	NA
B94	KKC012-Z1-B94@0-4'	29-Jan-24	0-4'	**27.8**	NA	NA
	KKC012-Z1-B94@4-8'	29-Jan-24	4-8'	0.671	NA	NA
B95	KKC012-Z1-B95@0-4'	29-Jan-24	0-4'	**9.41**	NA	NA
	KKC012-Z1-B95@4-8'	29-Jan-24	4-8'	**14.7**	NA	NA
B96	KKC012-Z1-B96@0-4'	29-Jan-24	0-4'	6.62	NA	NA
	KKC012-Z1-B96@4-8'	29-Jan-24	4-8'	3.5	NA	NA
B97	KKC012-Z1-B97@0-4'	29-Jan-24	0-4'	**26.5**	NA	NA
	KKC012-Z1-B97@4-8'	29-Jan-24	4-8'	0.428	NA	NA
B98	KKC012-Z1-B98@0-4'	29-Jan-24	0-4'	1.35	3.7	12.6
	KKC012-Z1-B98@4-8'	29-Jan-24	4-8'	0.231	2.77	6.15
B99	KKC012-Z1-B99@0-4'	29-Jan-24	0-4'	**13.4**	NA	NA
	KKC012-Z1-B99@4-8'	29-Jan-24	4-8'	0.289	NA	NA
B100	KKC012-Z1-B100@0-4'	29-Jan-24	0-4'	**16**	3.27	10.6
	KKC012-Z1-B100@4-8'	29-Jan-24	4-8'	5.42	2.68	8.73
B101	KKC012-Z1-B101@0-4'	22-Mar-24	0-4'	**15.6**	NA	NA
	KKC012-Z1-B101@4-8'	NS	4-8'	Refusal - No Sample		
B102	KKC012-Z1-B102@0-4'	22-Mar-24	0-4'	2.01	NA	NA
	KKC012-Z1-B102@4-8'	NS	4-8'	Refusal - No Sample		
B103	KKC012-Z1-B103@0-4'	22-Mar-24	0-4'	1.14	NA	NA
	KKC012-Z1-B103@4-8'	NS	4-8'	Refusal - No Sample		
B104	KKC012-Z1-B104@0-4'	1-Feb-24	0-4'	0.286	NA	NA
	KKC012-Z1-B104@4-8'	1-Feb-24	4-8'	0.0582	NA	NA
B105	KKC012-Z1-B105@0-4'	22-Mar-24	0-4'	**11.5**	NA	NA
	KKC012-Z1-B105@4-8'	NS	4-8'	Refusal - No Sample		
B106	KKC012-Z1-B106@0-4'	22-Mar-24	0-4'	**74.3**	NA	NA
	KKC012-Z1-B106@4-8'	NS	4-8'	Refusal - No Sample		
B107	KKC012-Z1-B107@0-4'	22-Mar-24	0-4'	0.539	NA	NA
	KKC012-Z1-B107@4-8'	NS	4-8'	Refusal - No Sample		
B108	KKC012-Z1-B108@0-4'	22-Mar-24	0-4'	0.505	NA	NA
	KKC012-Z1-B108@4-8'	NS	4-8'	Refusal - No Sample		
B109	KKC012-Z1-B109@0-4'	22-Mar-24	0-4'	1.51	NA	NA
	KKC012-Z1-B109@4-8'	NS	4-8'	Refusal - No Sample		
B110	KKC012-Z1-B110@0-4'	22-Mar-24	0-4'	5.93	NA	NA
	KKC012-Z1-B110@4-8'	NS	4-8'	Refusal - No Sample		
B111	KKC012-Z1-B111@0-4'	31-Jan-24	0-4'	**25.8**	2.84	23.3
	KKC012-Z1-B111@4-8'	31-Jan-24	4-8'	3.46	2.6	7.71
B112	KKC012-Z1-B112@0-4'	31-Jan-24	0-4'	3.88	NA	NA
	KKC012-Z1-B112@4-8'	31-Jan-24	4-8'	0.104	NA	NA
B113	KKC012-Z1-B113@0-4'	31-Jan-24	0-4'	0.187	NA	NA
	KKC012-Z1-B113@4-8'	31-Jan-24	4-8'	0.0298 J	NA	NA
B114	KKC012-Z1-B114@0-4'	29-Jan-24	0-4'	1.85	NA	NA
	KKC012-Z1-B114@4-8'	29-Jan-24	4-8'	0.318	NA	NA

Table 2. Summary of Analytical Results - Zone 1						
Sample Location	Sample ID	Date	Depth	Metals (mg/kg)		
				Mercury	Arsenic	Lead
B115	KKC012-Z1-B115@0-4'	29-Jan-24	0-4'	1.89	NA	NA
	KKC012-Z1-B115@4-8'	29-Jan-24	4-8'	0.0718	NA	NA
B116	KKC012-Z1-B116@0-4'	29-Jan-24	0-4'	2.45	NA	NA
	KKC012-Z1-B116@4-8'	29-Jan-24	4-8'	0.163	NA	NA
B117	KKC012-Z1-B117@0-4'	31-Jan-24	0-4'	0.385	NA	NA
	KKC012-Z1-B117@4-8'	31-Jan-24	4-8'	0.0601	NA	NA
B118	KKC012-Z1-B118@0-4'	30-Jan-24	0-4'	3.85	NA	NA
	KKC012-Z1-B118@4-8'	30-Jan-24	4-8'	0.112	NA	NA
B119	KKC012-Z1-B119@0-4'	30-Jan-24	0-4'	1.93	4.62	9.78
	KKC012-Z1-B119@4-8'	30-Jan-24	4-8'	0.0755	4.29	7.09
B120	KKC012-Z1-B120@0-4'	30-Jan-24	0-4'	1.88	NA	NA
	KKC012-Z1-B120@4-8'	30-Jan-24	4-8'	0.0253 J	NA	NA
B121	KKC012-Z1-B121@0-4'	30-Jan-24	0-4'	2.1	NA	NA
	KKC012-Z1-B121@4-8'	30-Jan-24	4-8'	0.0305 J	NA	NA
B122	KKC012-Z1-B122@0-4'	30-Jan-24	0-4'	2.45	4.84	8.97
	KKC012-Z1-B122@4-8'	30-Jan-24	4-8'	<0.0218	4.93	7.47
B123	KKC012-Z1-B123@0-4'	30-Jan-24	0-4'	0.736	NA	NA
	KKC012-Z1-B123@4-8'	30-Jan-24	4-8'	0.13	NA	NA
B124	KKC012-Z1-B124@0-4'	30-Jan-24	0-4'	2.76	NA	NA
	KKC012-Z1-B124@4-8'	30-Jan-24	4-8'	0.0228 J	NA	NA
B125	KKC012-Z1-B125@0-4'	30-Jan-24	0-4'	2.49	NA	NA
	KKC012-Z1-B125@4-8'	30-Jan-24	4-8'	0.0302 J	NA	NA
B126	KKC012-Z1-B126@0-4'	31-Jan-24	0-4'	0.166	NA	NA
	KKC012-Z1-B126@4-8'	31-Jan-24	4-8'	<0.0220	NA	NA
B127	KKC012-Z1-B127@0-4'	31-Jan-24	0-4'	0.112	2.97	10.4
	KKC012-Z1-B127@4-8'	31-Jan-24	4-8'	<0.0219	0.625 J	5.68
B128	KKC012-Z1-B128@0-4'	31-Jan-24	0-4'	0.436 J3 J5	NA	NA
	KKC012-Z1-B128@4-8'	31-Jan-24	4-8'	<0.0216	NA	NA
B129	KKC012-Z1-B129@0-4'	31-Jan-24	0-4'	0.794	NA	NA
	KKC012-Z1-B129@4-8'	31-Jan-24	4-8'	0.358	NA	NA
B130	KKC012-Z1-B130@0-4'	31-Jan-24	0-4'	5.81	NA	NA
	KKC012-Z1-B130@4-8'	31-Jan-24	4-8'	0.457	NA	NA
B131	KKC012-Z1-B131@0-4'	31-Jan-24	0-4'	**11.3**	2.79	15.2
	KKC012-Z1-B131@4-8'	31-Jan-24	4-8'	0.247	4.51	8.4
B132	KKC012-Z1-B132@0-4'	31-Jan-24	0-4'	**17.1**	NA	NA
	KKC012-Z1-B132@4-8'	31-Jan-24	4-8'	0.829	NA	NA
B133	KKC012-Z1-B133@0-4'	22-Mar-24	0-4'	2.58	NA	NA
	KKC012-Z1-B133@4-8'	NS	4-8'	Refusal - No Sample		
B134	KKC012-Z1-B134@0-4'	22-Mar-24	0-4'	0.279	NA	NA
	KKC012-Z1-B134@4-8'	NS	4-8'	Refusal - No Sample		
B135	KKC012-Z1-B135@0-4'	22-Mar-24	0-4'	0.263	NA	NA
	KKC012-Z1-B135@4-8'	NS	4-8'	Refusal - No Sample		
B136	KKC012-Z1-B136@0-4'	22-Mar-24	0-4'	0.561	NA	NA
	KKC012-Z1-B136@4-8'	NS	4-8'	Refusal - No Sample		

Table 2. Summary of Analytical Results - Zone 1						
Sample Location	Sample ID	Date	Depth	Metals (mg/kg)		
				Mercury	Arsenic	Lead
B137	KKC012-Z1-B137@0-4'	22-Mar-24	0-4'	4.92	NA	NA
	KKC012-Z1-B137@4-8'	NS	4-8'	Refusal - No Sample		
B138	KKC012-Z1-B138@0-4'	22-Mar-24	0-4'	**17.20**	NA	NA
	KKC012-Z1-B138@4-8'	NS	4-8'	Refusal - No Sample		
B139	KKC012-Z1-B139@0-4'	22-Mar-24	0-4'	**36.3**	NA	NA
	KKC012-Z1-B139@4-8'	NS	4-8'	Refusal - No Sample		
B140	KKC012-Z1-B140@0-4'	22-Mar-24	0-4'	1.51	NA	NA
	KKC012-Z1-B140@4-8'	NS	4-8'	Refusal - No Sample		
B141	KKC012-Z1-B141@0-4'	21-Mar-24	0-4'	3.77	NA	NA
	KKC012-Z1-B141@4-8'	NS	4-8'	Refusal - No Sample		
B142	KKC012-Z1-B142@0-4'	21-Mar-24	0-4'	2	NA	NA
	KKC012-Z1-B142@4-8'	NS	4-8'	Refusal - No Sample		
B143	KKC012-Z1-B143@0-4'	21-Mar-24	0-4'	**7.24**	NA	NA
	KKC012-Z1-B143@4-8'	NS	4-8'	Refusal - No Sample		
B144	KKC012-Z1-B144@0-4'	21-Mar-24	0-4'	**8.55**	NA	NA
	KKC012-Z1-B144@4-8'	NS	4-8'	Refusal - No Sample		
B145	KKC012-Z1-B145@0-4'	22-Mar-24	0-4'	1.2	NA	NA
	KKC012-Z1-B145@4-8'	NS	4-8'	Refusal - No Sample		
B146	KKC012-Z1-B146@0-4'	22-Mar-24	0-4'	1.1	NA	NA
	KKC012-Z1-B146@4-8'	NS	4-8'	Refusal - No Sample		
B147	KKC012-Z1-B147@0-4'	22-Mar-24	0-4'	1.09	NA	NA
	KKC012-Z1-B147@4-8'	NS	4-8'	Refusal - No Sample		
B148	KKC012-Z1-B148@0-4'	31-Jan-24	0-4'	1.13	NA	NA
	KKC012-Z1-B148@4-8'	31-Jan-24	4-8'	0.739	NA	NA
B149	KKC012-Z1-B149@0-4'	31-Jan-24	0-4'	**9.73**	NA	NA
	KKC012-Z1-B149@4-8'	31-Jan-24	4-8'	0.186	NA	NA
B150	KKC012-Z1-B150@0-4'	31-Jan-24	0-4'	5.18	NA	NA
	KKC012-Z1-B150@4-8'	31-Jan-24	4-8'	0.354	NA	NA
B151	KKC012-Z1-B151@0-4'	31-Jan-24	0-4'	0.146	NA	NA
	KKC012-Z1-B151@4-8'	31-Jan-24	4-8'	0.0522	NA	NA
B152	KKC012-Z1-B152@0-4'	31-Jan-24	0-4'	0.338	NA	NA
	KKC012-Z1-B152@4-8'	31-Jan-24	4-8'	<0.0207	NA	NA
B153	KKC012-Z1-B153@0-4'	31-Jan-24	0-4'	0.908	3.65	8.24
	KKC012-Z1-B153@4-8'	31-Jan-24	4-8'	<0.215	2.09 J	8.8
B154	KKC012-Z1-B154@0-4'	31-Jan-24	0-4'	0.102	NA	NA
	KKC012-Z1-B154@4-8'	31-Jan-24	4-8'	<0.0215	NA	NA
B155	KKC012-Z1-B155@0-4'	30-Jan-24	0-4'	0.28	NA	NA
	KKC012-Z1-B155@4-8'	30-Jan-24	4-8'	<0.0213	NA	NA
B156	KKC012-Z1-B156@0-4'	30-Jan-24	0-4'	0.247	5.45	9.18
	KKC012-Z1-B156@4-8'	30-Jan-24	4-8'	0.0448 J	9.71	7.98
B157	KKC012-Z1-B157@0-4'	30-Jan-24	0-4'	1.02	NA	NA
	KKC012-Z1-B157@4-8'	30-Jan-24	4-8'	0.0412 J	NA	NA
B158	KKC012-Z1-B158@0-4'	30-Jan-24	0-4'	0.303	NA	NA
	KKC012-Z1-B158@4-8'	30-Jan-24	4-8'	<0.0223	NA	NA

Table 2. Summary of Analytical Results - Zone 1						
Sample Location	Sample ID	Date	Depth	Metals (mg/kg)		
				Mercury	Arsenic	Lead
B159	KKC012-Z1-B159@0-4'	30-Jan-24	0-4'	0.999	NA	NA
	KKC012-Z1-B159@4-8'	30-Jan-24	4-8'	0.0255 J	NA	NA
B160	KKC012-Z1-B160@0-4'	30-Jan-24	0-4'	3.45	NA	NA
	KKC012-Z1-B160@4-8'	30-Jan-24	4-8'	0.13	NA	NA
B161	KKC012-Z1-B161@0-4'	30-Jan-24	0-4'	0.995	6.7	11
	KKC012-Z1-B161@4-8'	30-Jan-24	4-8'	0.102	3.93	8.17
B162	KKC012-Z1-B162@0-4'	30-Jan-24	0-4'	0.65	NA	NA
	KKC012-Z1-B162@4-8'	30-Jan-24	4-8'	<0.0218	NA	NA
B163	KKC012-Z1-B163@0-4'	30-Jan-24	0-4'	5.11	NA	NA
	KKC012-Z1-B163@4-8'	30-Jan-24	4-8'	0.0226 J	NA	NA
B164	KKC012-Z1-B164@0-4'	30-Jan-24	0-4'	6.57	NA	NA
	KKC012-Z1-B164@4-8'	30-Jan-24	4-8'	0.0501	NA	NA
B165	KKC012-Z1-B165@0-4'	30-Jan-24	0-4'	2.72	9.5	11.3
	KKC012-Z1-B165@4-8'	30-Jan-24	4-8'	0.102	5.47	6.12
B166	KKC012-Z1-B166@0-4'	31-Jan-24	0-4'	2.33	NA	NA
	KKC012-Z1-B166@4-8'	31-Jan-24	4-8'	<0.0212	NA	NA
B167	KKC012-Z1-B167@0-4'	31-Jan-24	0-4'	1.39	NA	NA
	KKC012-Z1-B167@4-8'	31-Jan-24	4-8'	0.0249 J	NA	NA
B168	KKC012-Z1-B168@0-4'	31-Jan-24	0-4'	0.759	NA	NA
	KKC012-Z1-B168@4-8'	31-Jan-24	4-8'	0.747	NA	NA
B169	KKC012-Z1-B169@0-4'	31-Jan-24	0-4'	**41.1**	NA	NA
	KKC012-Z1-B169@4-8'	31-Jan-24	4-8'	0.42	NA	NA
B170	KKC012-Z1-B170@0-4'	31-Jan-24	0-4'	3.64	3.16	13.6
	KKC012-Z1-B170@4-8'	31-Jan-24	4-8'	**79.7**	3.53	32.7
B171	KKC012-Z1-B171@0-4'	21-Mar-24	0-4'	0.09	NA	NA
	KKC012-Z1-B171@4-8'	NS	4-8'	Refusal - No Sample		
B172	KKC012-Z1-B172@0-4'	21-Mar-24	0-4'	0.10	3.94	6.51
	KKC012-Z1-B172@4-8'	NS	4-8'	Refusal - No Sample		
B173	KKC012-Z1-B173@0-4'	21-Mar-24	0-4'	0.27	NA	NA
	KKC012-Z1-B173@4-8'	NS	4-8'	Refusal - No Sample		
B174	KKC012-Z1-B174@0-4'	21-Mar-24	0-4'	0.73	NA	NA
	KKC012-Z1-B174@4-8'	NS	4-8'	Refusal - No Sample		
B175	KKC012-Z1-B175@0-4'	21-Mar-24	0-4'	4.24	4.82	18.3
	KKC012-Z1-B175@4-8'	NS	4-8'	Refusal - No Sample		
B176	KKC012-Z1-B176@0-4'	21-Mar-24	0-4'	**26.30**	NA	NA
	KKC012-Z1-B176@4-8'	NS	4-8'	Refusal - No Sample		
B177	KKC012-Z1-B177@0-4'	21-Mar-24	0-4'	**7.28**	NA	NA
	KKC012-Z1-B177@4-8'	NS	4-8'	Refusal - No Sample		
B178	KKC012-Z1-B178@0-4'	31-Jan-24	0-4'	0.14	NA	NA
	KKC012-Z1-B178@4-8'	31-Jan-24	4-8'	0.08	NA	NA
B179	KKC012-Z1-B179@0-4'	31-Jan-24	0-4'	6.08	NA	NA
	KKC012-Z1-B179@4-8'	31-Jan-24	4-8'	2.72	NA	NA
B180	KKC012-Z1-B180@0-4'	31-Jan-24	0-4'	**8.51**	2.43	14.9
	KKC012-Z1-B180@4-8'	31-Jan-24	4-8'	0.20	1.60 J	5.29

Table 2. Summary of Analytical Results - Zone 1						
Sample Location	Sample ID	Date	Depth	Metals (mg/kg)		
				Mercury	Arsenic	Lead
B181	KKC012-Z1-B181@0-4'	21-Mar-24	0-4'	1.00	NA	NA
	KKC012-Z1-B181@4-8'	NS	4-8'	Refusal - No Sample		
B182	KKC012-Z1-B182@0-4'	31-Jan-24	0-4'	1.93	NA	NA
	KKC012-Z1-B182@4-8'	31-Jan-24	4-8'	0.16	NA	NA
B183	KKC012-Z1-B183@0-4'	31-Jan-24	0-4'	**7.68**	NA	NA
	KKC012-Z1-B183@4-8'	31-Jan-24	4-8'	0.45	NA	NA
B184	KKC012-Z1-B184@0-4'	31-Jan-24	0-4'	3.70	NA	NA
	KKC012-Z1-B184@4-8'	31-Jan-24	4-8'	1.69	NA	NA
B185	KKC012-Z1-B185@0-4'	31-Jan-24	0-4'	**21.70**	NA	NA
	KKC012-Z1-B185@4-8'	31-Jan-24	4-8'	0.05	NA	NA
B186	KKC012-Z1-B186@0-4'	30-Jan-24	0-4'	**23.30**	2.84	16.7
	KKC012-Z1-B186@4-8'	30-Jan-24	4-8'	0.60	2.22 J	7.36
B187	KKC012-Z1-B187@0-4'	30-Jan-24	0-4'	0.28	NA	NA
	KKC012-Z1-B187@4-8'	30-Jan-24	4-8'	0.050 J	NA	NA
B188	KKC012-Z1-B188@0-4'	30-Jan-24	0-4'	0.81	NA	NA
	KKC012-Z1-B188@4-8'	30-Jan-24	4-8'	<0.210	NA	NA
B189	KKC012-Z1-B189@0-4'	30-Jan-24	0-4'	6.86	NA	NA
	KKC012-Z1-B189@4-8'	30-Jan-24	4-8'	0.12	NA	NA
B190	KKC012-Z1-B190@0-4'	30-Jan-24	0-4'	2.67	7.11	13.2
	KKC012-Z1-B190@4-8'	30-Jan-24	4-8'	0.13	11.3	9.11
B191	KKC012-Z1-B191@0-4'	30-Jan-24	0-4'	2.29	NA	NA
	KKC012-Z1-B191@4-8'	30-Jan-24	4-8'	0.18	NA	NA
B192	KKC012-Z1-B192@0-4'	30-Jan-24	0-4'	4.29	NA	NA
	KKC012-Z1-B192@4-8'	30-Jan-24	4-8'	0.23	NA	NA
B193	KKC012-Z1-B193@0-4'	30-Jan-24	0-4'	1.54	7.15	12.2
	KKC012-Z1-B193@4-8'	30-Jan-24	4-8'	0.82	7.26	7.93
B194	KKC012-Z1-B194@0-4'	30-Jan-24	0-4'	4.48	NA	NA
	KKC012-Z1-B194@4-8'	30-Jan-24	4-8'	2.27	NA	NA
B195	KKC012-Z1-B195@0-4'	30-Jan-24	0-4'	**7.83 J3 V**	9.27	18.6
	KKC012-Z1-B195@4-8'	30-Jan-24	4-8'	0.35	18.4	9.54
B196	KKC012-Z1-B196@0-4'	30-Jan-24	0-4'	0.74	NA	NA
	KKC012-Z1-B196@4-8'	30-Jan-24	4-8'	0.25	NA	NA
B197	KKC012-Z1-B197@0-4'	30-Jan-24	0-4'	3.84	NA	NA
	KKC012-Z1-B197@4-8'	30-Jan-24	4-8'	0.13	NA	NA
B198	KKC012-Z1-B198@0-4'	30-Jan-24	0-4'	3.01 J3 V	6.03	9.54
	KKC012-Z1-B198@4-8'	30-Jan-24	4-8'	0.323 J	9.86	6.7
B199	KKC012-Z1-B199@0-4'	30-Jan-24	0-4'	3.54	NA	NA
	KKC012-Z1-B199@4-8'	30-Jan-24	4-8'	0.07	NA	NA
B200	KKC012-Z1-B200@0-4'	30-Jan-24	0-4'	**13.20**	NA	NA
	KKC012-Z1-B200@4-8'	30-Jan-24	4-8'	0.21	NA	NA
B201	KKC012-Z1-B201@0-4'	31-Jan-24	0-4'	**8.05**	NA	NA
	KKC012-Z1-B201@4-8'	31-Jan-24	4-8'	0.10	NA	NA
B202	KKC012-Z1-B202@0-4'	31-Jan-24	0-4'	6.39	2.39	12.8
	KKC012-Z1-B202@4-8'	31-Jan-24	4-8'	0.56	1.52	6.19

Table 2. Summary of Analytical Results - Zone 1						
Sample Location	Sample ID	Date	Depth	Metals (mg/kg)		
				Mercury	Arsenic	Lead
B203	KKC012-Z1-B203@0-4'	31-Jan-24	0-4'	**7.46**	NA	NA
	KKC012-Z1-B203@4-8'	31-Jan-24	4-8'	0.0811 J5 O1	NA	NA
B204	KKC012-Z1-B204@0-4'	31-Jan-24	0-4'	4.17	2.06	9.27
	KKC012-Z1-B204@4-8'	31-Jan-24	4-8'	<0.0193	1.27	5.62
B205	KKC012-Z1-B205@0-4'	31-Jan-24	0-4'	**169**	NA	NA
	KKC012-Z1-B205@4-8'	31-Jan-24	4-8'	0.94	NA	NA
B206	KKC012-Z1-B206@0-4'	31-Jan-24	0-4'	**22.10**	3.93	40.7
	KKC012-Z1-B206@4-8'	NS	4-8'	Refusal - No Sample		
B207	KKC012-Z1-B207@0-4'	31-Jan-24	0-4'	0.54	NA	NA
	KKC012-Z1-B207@4-8'	31-Jan-24	4-8'	0.0225 J	NA	NA
B208	KKC012-Z1-B208@0-4'	31-Jan-24	0-4'	0.89	NA	NA
	KKC012-Z1-B208@4-8'	31-Jan-24	4-8'	0.0394 J	NA	NA
B209	KKC012-Z1-B209@0-4'	31-Jan-24	0-4'	0.37	NA	NA
	KKC012-Z1-B209@4-8'	31-Jan-24	4-8'	0.05	NA	NA
B210	KKC012-Z1-B210@0-4'	30-Jan-24	0-4'	**7.20**	3.65	7.88
	KKC012-Z1-B210@4-8'	30-Jan-24	4-8'	1.34	2.46	5.6
B211	KKC012-Z1-B211@0-4'	30-Jan-24	0-4'	**26.5**	NA	NA
	KKC012-Z1-B211@4-8'	30-Jan-24	4-8'	0.459	NA	NA
B212	KKC012-Z1-B212@0-4'	30-Jan-24	0-4'	2.36	NA	NA
	KKC012-Z1-B212@4-8'	30-Jan-24	4-8'	0.195	NA	NA
B213	KKC012-Z1-B213@0-4'	30-Jan-24	0-4'	6.14	NA	NA
	KKC012-Z1-B213@4-8'	30-Jan-24	4-8'	0.303	NA	NA
B214	KKC012-Z1-B214@0-4'	30-Jan-24	0-4'	2.18	NA	NA
	KKC012-Z1-B214@4-8'	30-Jan-24	4-8'	0.0634	NA	NA
EPA RSL (Commercial Soils)				**30**	**3.0**	**800**
EPA RSL (Residential)				**7.1**	**0.69**	**200**

mg/kg	milligram per kilogram
RSL	Environmental Protection Agency Regional Screening Level
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures
V	The sample concentration is too high to evaluate accurate spike recoveries.
NA	Not Analyzed
NS	Not sampled

* Exceedance of the arsenic RSLs are not called out within the table as regional background concentrations are known to be well above RSLs

Table 3. Summary of Analytical Results - Zone 2			
Sample Location	**Sample ID**	**Date**	**Mercury (mg/kg)**
S1	KKC012-Z2-S1-L	26-Jan-24	0.455 J6
	KKC012-Z2-S1-U	26-Jan-24	1.46
S2	KKC012-Z2-S2-L	26-Jan-24	0.492
	KKC012-Z2-S2-U	26-Jan-24	<0.0201
S3	KKC012-Z2-S3-L	26-Jan-24	0.264
	KKC012-Z2-S3-U	26-Jan-24	1.53
S4	KKC012-Z2-S4-L	26-Jan-24	**9.98**
	KKC012-Z2-S4-U	26-Jan-24	0.823
S5	KKC012-Z2-S5-L	26-Jan-24	**14.3**
	KKC012-Z2-S5-U	26-Jan-24	**52.2**
S6	KKC012-Z2-S6-L	26-Jan-24	0.866
	KKC012-Z2-S6-U	26-Jan-24	0.455
S7	KKC012-Z2-S7-L	26-Jan-24	0.168
	KKC012-Z2-S7-U	26-Jan-24	2.17
S8	KKC012-Z2-S8-L	26-Jan-24	2.03
	KKC012-Z2-S8-U	26-Jan-24	0.336
S9	KKC012-Z2-S9-L	26-Jan-24	4.97
	KKC012-Z2-S9-U	26-Jan-24	0.255
S10	KKC012-Z2-S10-L	26-Jan-24	0.284
	KKC012-Z2-S10-U	26-Jan-24	0.173
S11	KKC012-Z2-S11-L	26-Jan-24	0.479
	KKC012-Z2-S11-U	26-Jan-24	4.42
S12	KKC012-Z2-S12-L	2-Feb-24	3.53
	KKC012-Z2-S12-U	2-Feb-24	0.818
S13	KKC012-Z2-S13-L	2-Feb-24	**11.5**
	KKC012-Z2-S13-U	2-Feb-24	**9.34**
S14	KKC012-Z2-S14-L	2-Feb-24	2.55
	KKC012-Z2-S14-U	2-Feb-24	2.7
S15	KKC012-Z2-S15-L	2-Feb-24	4.01
	KKC012-Z2-S15-U	2-Feb-24	0.191
S16	KKC012-Z2-S16-L	2-Feb-24	2.73
	KKC012-Z2-S16-U	2-Feb-24	0.575
S17	KKC012-Z2-S17-L	2-Feb-24	**10.5**
	KKC012-Z2-S17-U	2-Feb-24	**13.9**
S18	KKC012-Z2-S18-L	2-Feb-24	**7.2**
	KKC012-Z2-S18-U	2-Feb-24	**10.1**
S19	KKC012-Z2-S19-L	2-Feb-24	**19.1**
	KKC012-Z2-S19-U	2-Feb-24	80.4
S20	KKC012-Z2-S20-L	2-Feb-24	**15.6**
	KKC012-Z2-S20-U	2-Feb-24	**130**
S21	KKC012-Z2-S21-L	2-Feb-24	2.58
	KKC012-Z2-S21-U	2-Feb-24	**311**
S22	KKC012-Z2-S22-L	2-Feb-24	0.181
	KKC012-Z2-S22-U	2-Feb-24	1.59
S23	KKC012-Z2-S23-L	2-Feb-24	0.0392 J
	KKC012-Z2-S23-U	2-Feb-24	0.0508
EPA RSL (Commercial)			**30**
EPA RSL (Residential)			**7.1**

mg/kg	miligram per kilogram
RSL	Environmental Protection Agency Regional Screening Level
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low

Table 4. Summary of Analytical Results - Zone 3			
Sample Location	**Sample ID**	**Date**	**Mercury (mg/kg)**
S1	KKC012-Z3-S1	19-Jan-24	0.424
S2	KKC012-Z3-S2	19-Jan-24	0.558
S3	KKC012-Z3-S3	19-Jan-24	0.483
S4	KKC012-Z3-S4	19-Jan-24	0.981
S5	KKC012-Z3-S5	19-Jan-24	0.154
S6	KKC012-Z3-S6	25-Jan-24	0.0269
S7	KKC012-Z3-S7	25-Jan-24	0.068
S8	KKC012-Z3-S8	25-Jan-24	0.0543
S9	KKC012-Z3-S9	25-Jan-24	0.994
S10	KKC012-Z3-S10	25-Jan-24	0.359
S11	KKC012-Z3-S11	25-Jan-24	0.239
S12	KKC012-Z3-S12	25-Jan-24	0.0549
S13	KKC012-Z3-S13	25-Jan-24	0.0504
S14	KKC012-Z3-S14	25-Jan-24	0.183
S15	KKC012-Z3-S15	25-Jan-24	0.14 B
S16	KKC012-Z3-S16	25-Jan-24	0.212 B
S17	KKC012-Z3-S17	25-Jan-24	0.434
S18	KKC012-Z3-S18	25-Jan-24	0.491
S19	KKC012-Z3-S19	25-Jan-24	0.0463 B
S20	KKC012-Z3-S20	25-Jan-24	1.4
S21	KKC012-Z3-S21	25-Jan-24	0.374 O1
S22	KKC012-Z3-S22	25-Jan-24	0.778
S23	KKC012-Z3-S23	25-Jan-24	1.19
EPA RSL (Commercial)			**30**
EPA RSL (Residential)			**7.1**

mg/kg	miligram per kilogram
RSL	Environmental Protection Agency Regional Screening Level
B	The same analyte is found in the associated blank.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

Table 5. Summary of Analytical Results					
Sample Location	**Sample ID**	**Date**	**Mercury (mg/kg)**	**Arsenic (mg/kg)**	**Lead (mg/kg)**
B215	KKC012-B215@4FT	3/4/2025	9.39	NA	NA
B216	KKC012-B216@4FT	3/4/2025	4.90	NA	NA
B217	KKC012-B217@4FT	3/4/2025	0.238	NA	NA
B218	KKC012-B218@4FT	3/13/2025	7.62	NA	NA
B219	KKC012-B219@4FT	3/13/2025	3.89	NA	NA
B220	KKC012-B220@4FT	3/4/2025	7.33	NA	NA
B221	KKC012-B221@4FT	3/4/2025	11.5	NA	NA
B222	KKC012-B222@4FT	3/4/2025	4.97	NA	NA
B223	KKC012-B223@4FT	3/4/2025	48.5	NA	NA
B224	KKC012-B224@4FT	3/4/2025	19.4	NA	NA
B225	KKC012-B225@4FT	3/4/2025	56.0	NA	NA
B226	KKC012-B226@4FT	3/4/2025	12.8	NA	NA
B227	KKC012-B227@4FT	3/4/2025	27.3	NA	NA
B228	KKC012-B228@4FT	3/4/2025	9.20	NA	NA
B229	KKC012-B229@4FT	3/4/2025	1.63	NA	NA
B230	KKC012-B230@4FT	3/4/2025	3.43	NA	NA
B231	KKC012-B231@4FT	3/5/2025	0.84	NA	NA
B232	KKC012-B232@4FT	3/5/2025	<0.0415	NA	NA
B233	KKC012-B233@4FT	3/5/2025	<0.0431	NA	NA
B234	KKC012-B234@4FT	3/5/2025	0.109	NA	NA
B235	KKC012-B235@4FT	3/5/2025	1.01	NA	NA
B236	KKC012-B236@4FT	3/5/2025	0.545	NA	NA
B237	KKC012-B237@4FT	3/5/2025	0.607	NA	NA
B238	KKC012-B238@4FT	3/5/2025	NA	22.2	48.5
B239	KKC012-B239@4FT	3/5/2025	NA	11.4	68.6
B241	KKC012-B241@3FT	3/13/2025	8.60	NA	NA
B242	KKC012-B242@4FT	3/13/2025	3.17	NA	NA
B243	KKC012-B243@4FT	3/13/2025	2.89	NA	NA
B244	KKC012-B244@4FT	3/13/2025	0.704	NA	NA
EPA RSL (Commercial)			**30**	**3.0**	**800**
EPA RSL (Residential)			**7.1**	**0.68**	**200**

mg/kg	miligrams per kilogram
NA	not analyzed
EPA RSL	Environmental Protection Agency Regional Screening Level

FIGURES

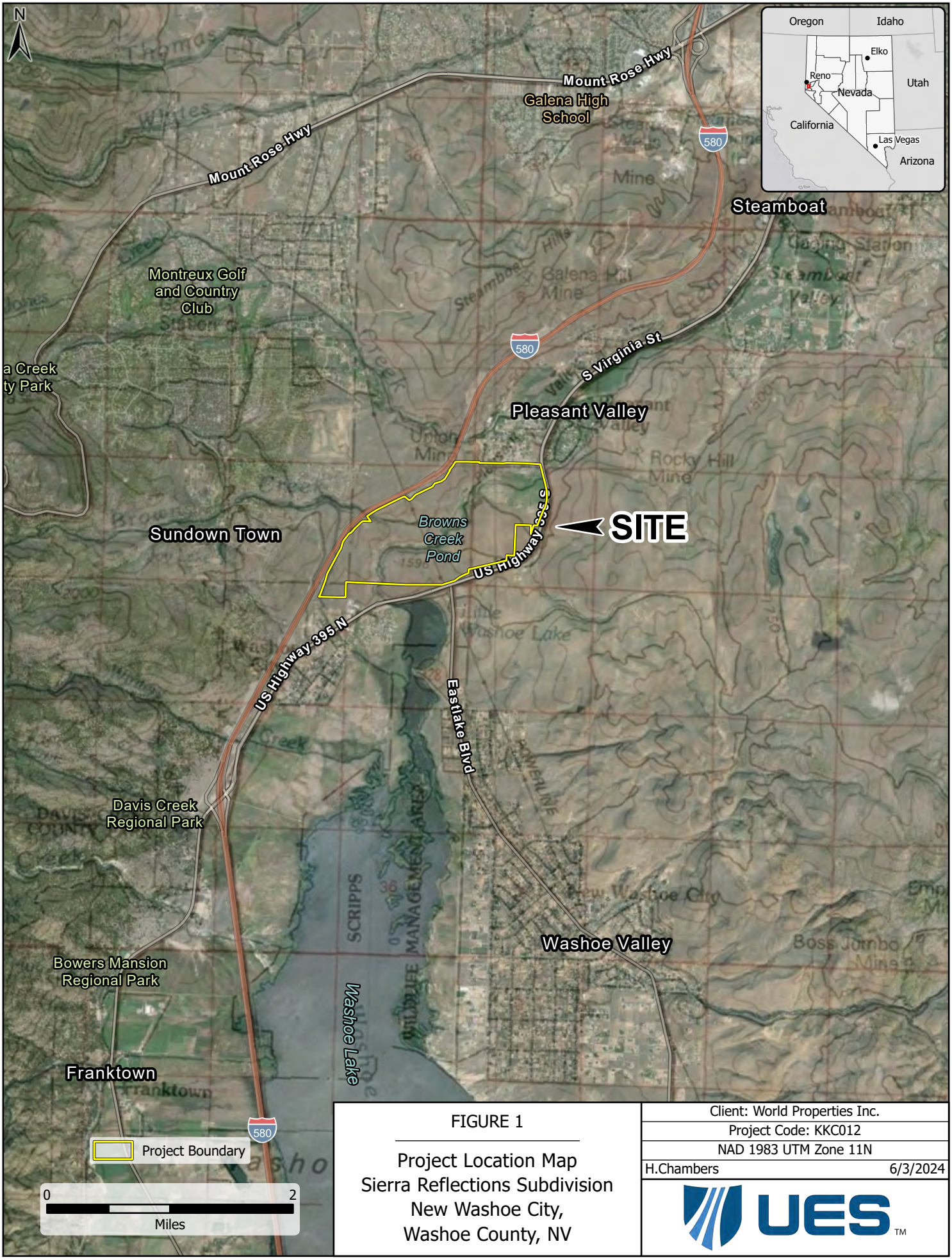

FIGURE 1

Project Location Map
Sierra Reflections Subdivision
New Washoe City,
Washoe County, NV

Client: World Properties Inc.	
Project Code: KKC012	
NAD 1983 UTM Zone 11N	
H.Chambers	6/3/2024

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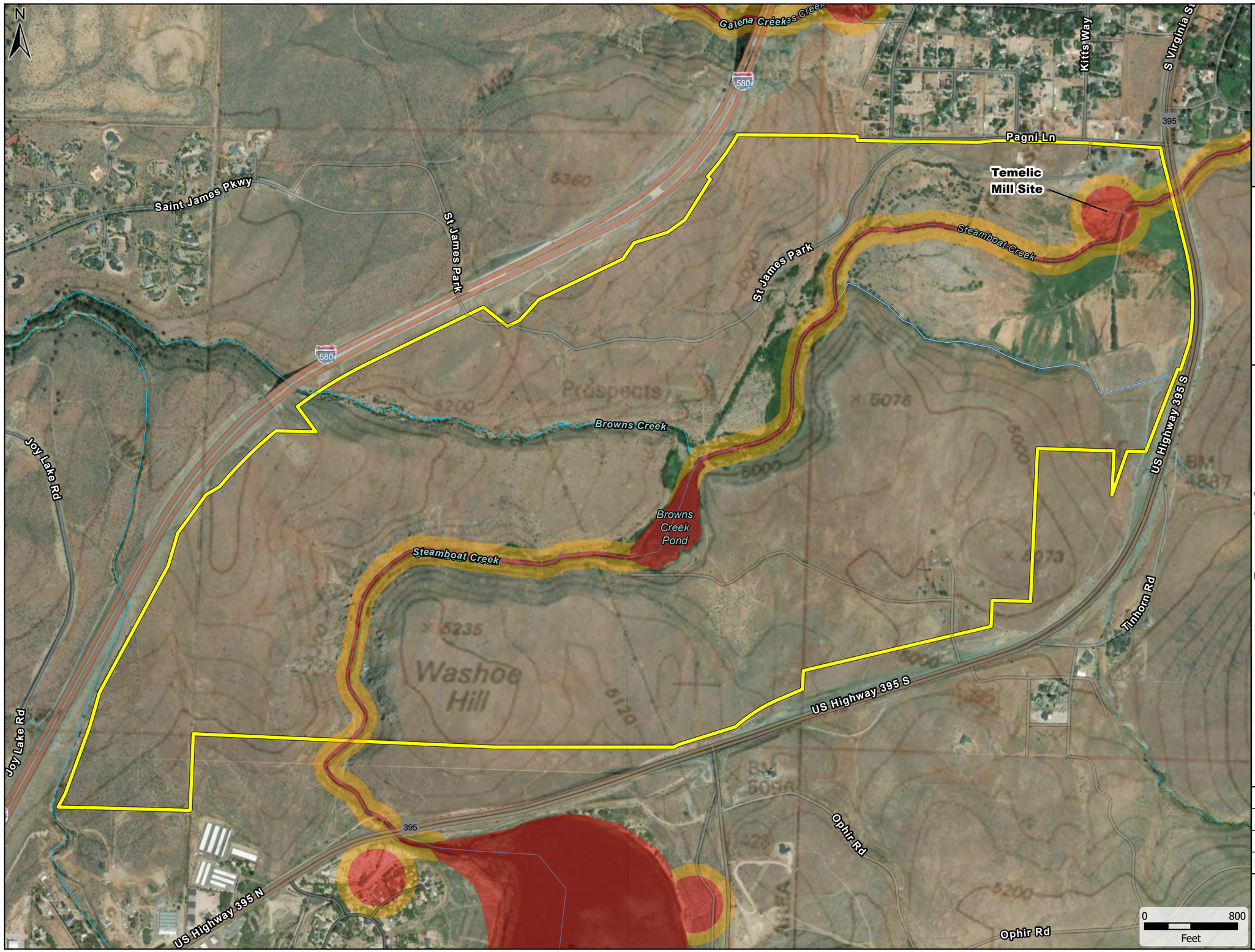

FIGURE 2

Site Map
-showing-
CRMS Zones
Sierra Reflections Subdivision
New Washoe City,
Washoe County, NV

Project Boundary

CRMS Zones

High Risk

Moderate Risk

USGS National Hydrography Dataset

Canal Ditch

Artificial Path

Ephemeral Stream

Perennial Stream

Client: World Properties Inc.	
Project Code: KKC012	
NAD 1983 UTM Zone 11N	
H.Chambers	6/3/2024

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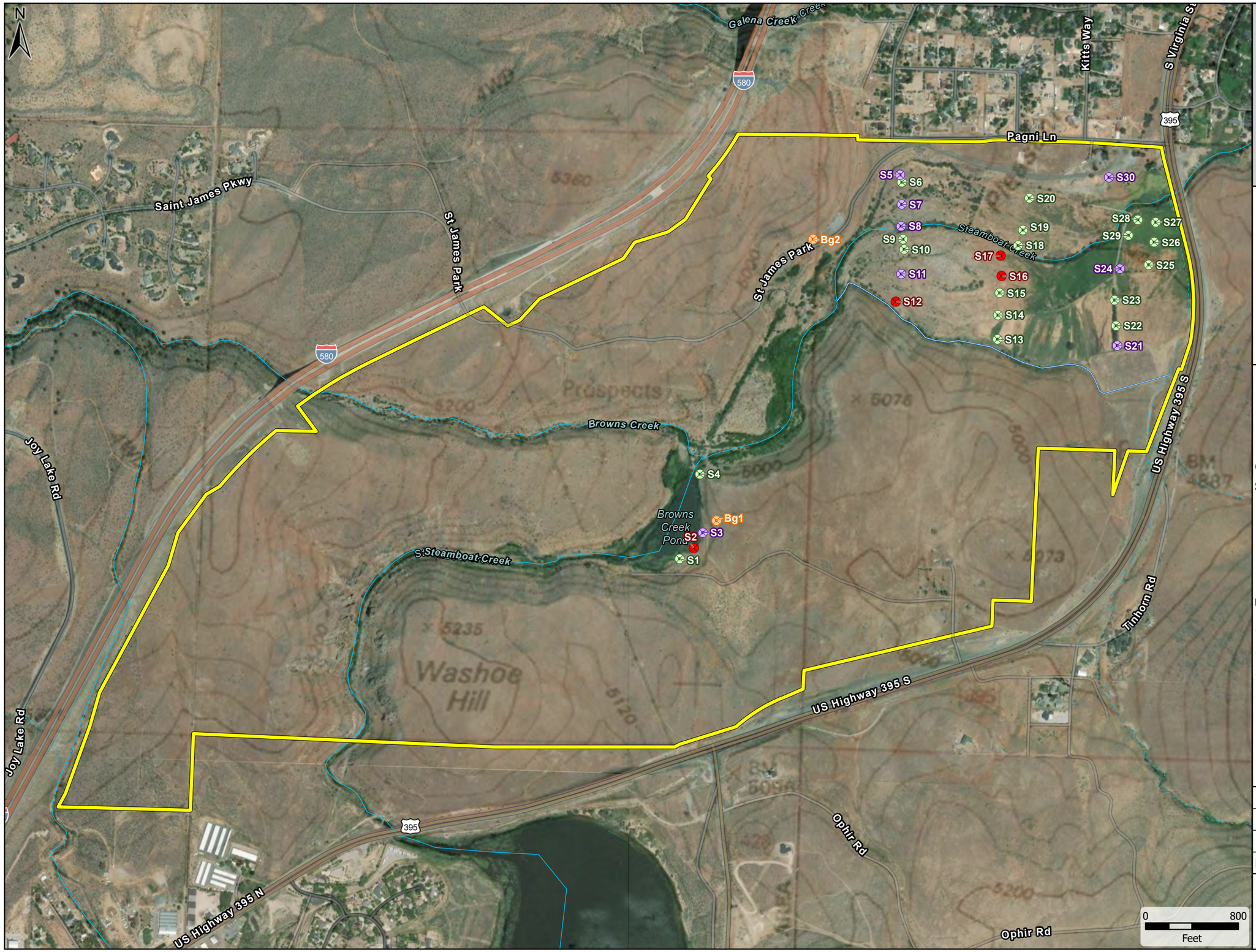

FIGURE 3

Site Map
-showing-
Screening Samples
Sierra Reflections Subdivision
New Washoe City,
Washoe County, NV

Project Boundary

Soil Sample Locations

- Background Soil Sampling Location
- Below Residential Action Level of 11mg/Kg
- Above Residential Action Level of 11 mg/Kg
- Above Commercial Action Level of 46 mg/Kg

USGS National Hydrography Dataset

- Canal Ditch
- Artificial Path
- Ephemeral Stream
- Perennial Stream

Client: World Properties Inc.	
Project Code: KKC012	
NAD 1983 UTM Zone 11N	
H.Chambers	6/3/2024

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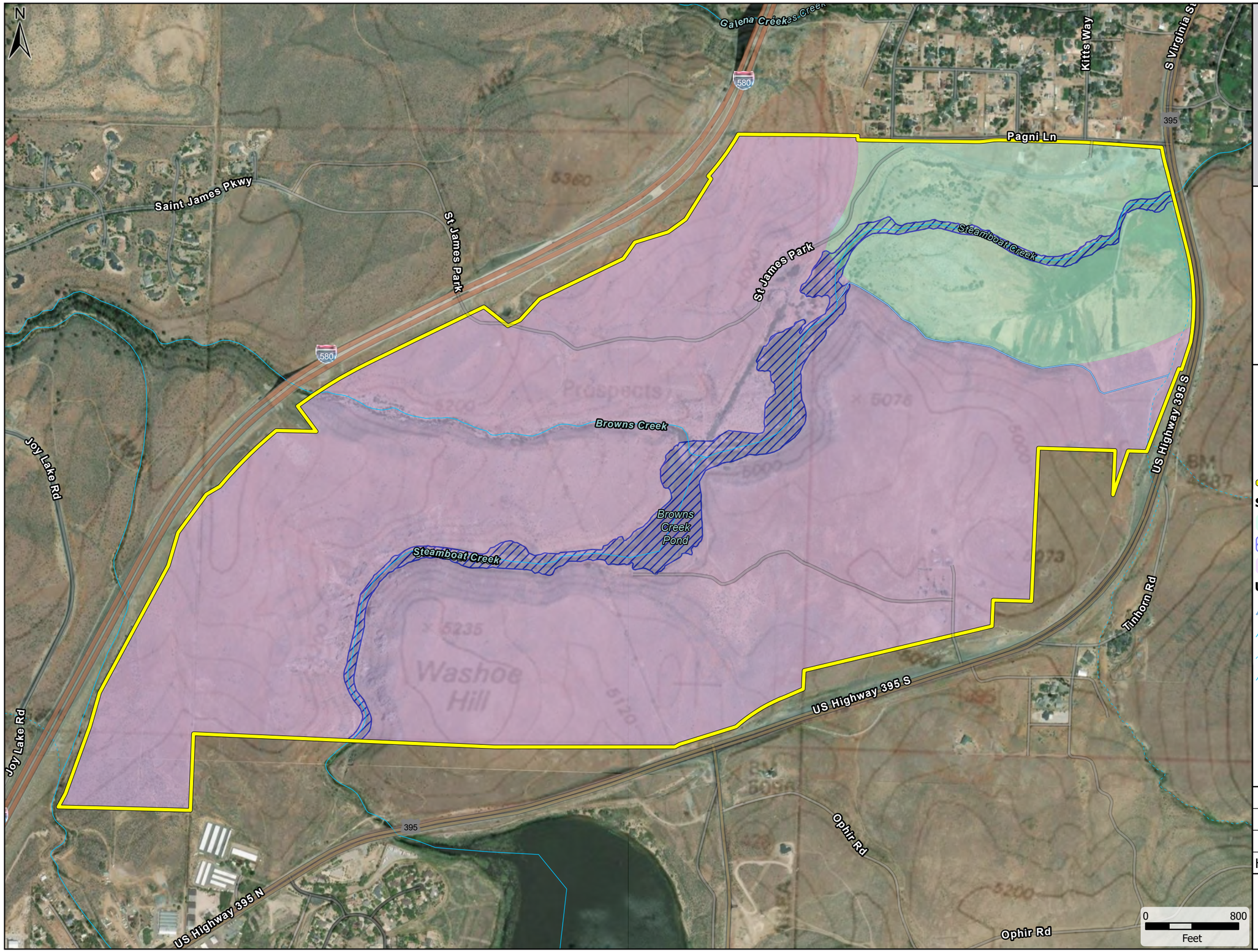

FIGURE 4

Site Map
-showing-
Sampling Zones
Sierra Reflections Subdivision
New Washoe City,
Washoe County, NV

Project Boundary

Sampling Zone

1
2
3

USGS National Hydrography Dataset

Canal Ditch
Artificial Path
Ephemeral Stream
Perennial Stream

Client: World Properties Inc.

Project Code: KKC012

NAD 1983 UTM Zone 11N

H.Chambers 6/3/2024

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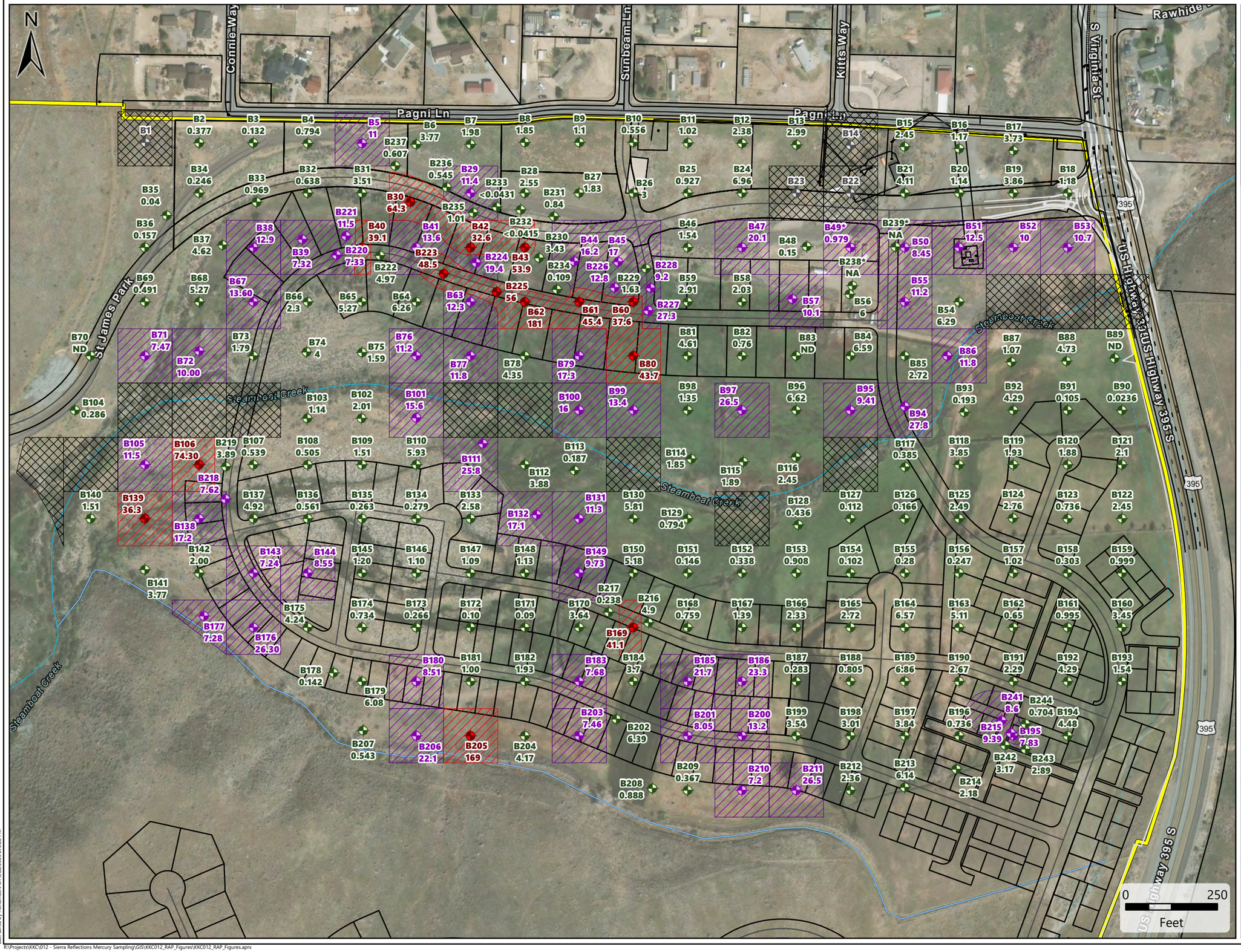

FIGURE 5A

Zone 1 Boring Locations at Depth 0-4'
and Roadway Exhibit
Sierra Reflections Subdivision
New Washoe City, Washoe County, NV

Boring Locations

- Removed from Sampling Plan
- Below Residential Action Level of 7.1mg/Kg
- Above Residential Action Level of 7.1mg/Kg
- Above Commercial Action Level of 30mg/Kg

½ Acre Sampling Grid for Borings

- Grid Cell Above Commercial Action Level of 30 mgKg
- Grid Cell Above Residential Action Level of 7.1 mgKg
- Removed from Sampling Plan

USGS National Hydrography Dataset

- Canal Ditch
- Ephemeral Stream
- Perennial Stream
- Centerline of Road
- Traffic Circle
- Lots & Curbs
- Project Boundary

Notes:
ND = Non-Detect

* Cell B49 exhibited mercury < 11mg/kg; however, lead and arsenic concentrations were above residential action levels.

Client: World Properties Inc.	
Project Code: KKC012	
NAD 1983 UTM Zone 11N	
H.Chambers	3/28/2025

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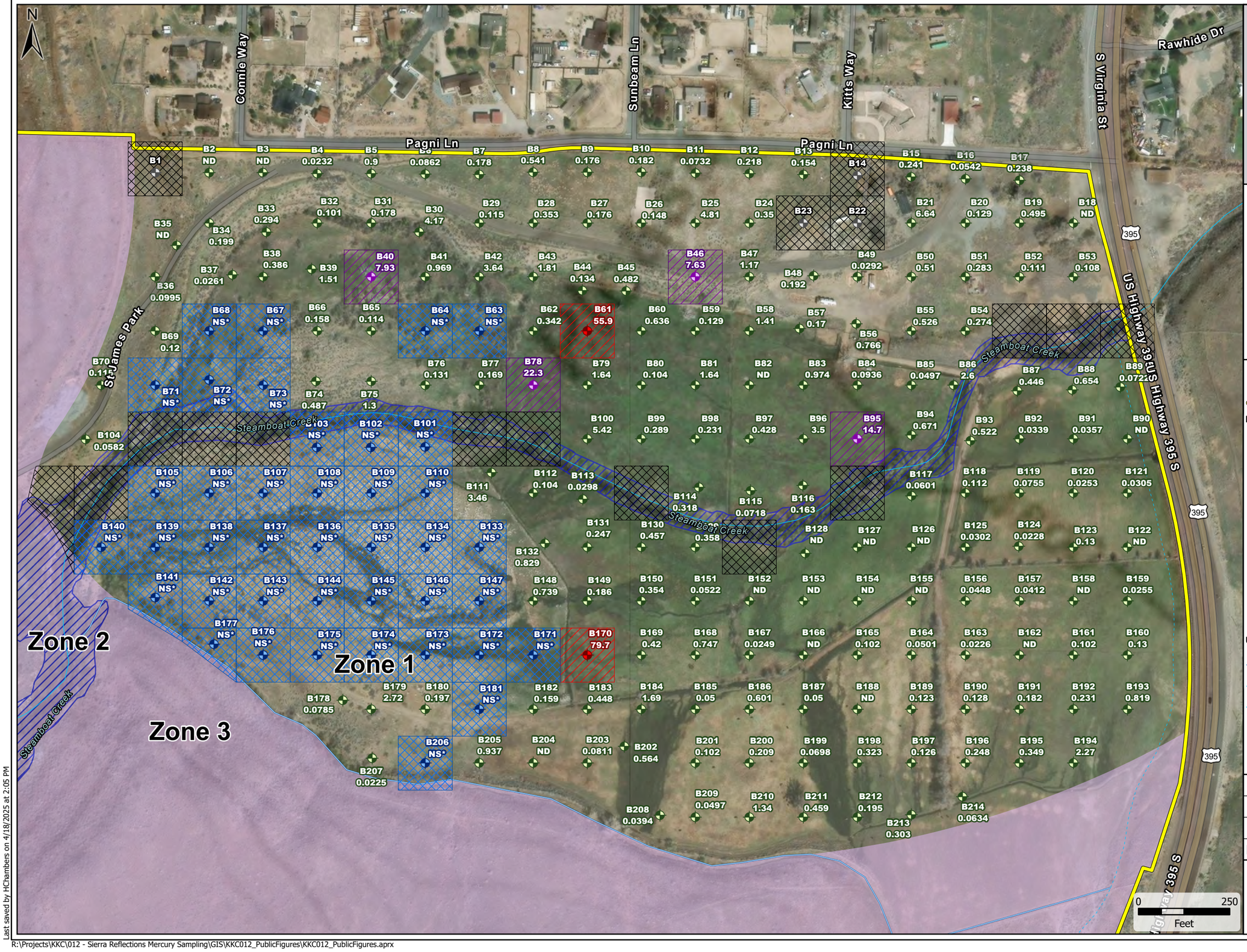

FIGURE 5B

Site Map
-showing-
Zone 1 Boring Locations at Depth 4-8'
Sierra Reflections Subdivision
New Washoe City,
Washoe County, NV

Project Boundary

Boring Locations

- Removed from Sampling Plan
- No Sample Collected Due to Refusal During Drilling
- Below Residential Action Level of 7.1mg/Kg
- Above Residential Action Level of 7.1 mg/Kg
- Above Commercial Action Level of 30 mg/Kg

½ Acre Sampling Grid

- Removed from Sampling Plan
- No Sample Collected Due to Refusal During Drilling
- Grid Cell Above Residential Action Level of 7.1 mg/Kg
- Grid Cell Above Commercial Action Level of 30 mg/Kg

USGS National Hydrography Dataset

- Canal Ditch
- Ephemeral Stream
- Perennial Stream

Notes:
ND = Non-Detect
NS* = No sample collected due to refusal during drilling.

Client: World Properties Inc.

Project Code: KKC012

NAD 1983 UTM Zone 11N

H.Chambers 4/18/2025

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APPENDIX A

Remedial Action Grading Plans

PROPOSED DRAFT DEED RESTRICTED EASEMENT FOR PLACEMENT OF CONTAMINATED SOIL

PROPOSED DRAFT DEED RESTRICTED EASEMENT FOR PLACEMENT OF CONTAMINATED SOIL

PROPOSED DRAFT DEED RESTRICTED EASEMENT FOR PLACEMENT OF CONTAMINATED SOIL

CUT AREA, TYPICAL

FILL AREA, TYPICAL

PROPOSED DRAFT DEED RESTRICTED EASEMENT FOR PLACEMENT OF CONTAMINATED SOIL

PROPOSED DRAFT DEED RESTRICTED EASEMENT FOR PLACEMENT OF CONTAMINATED SOIL

PROPOSED DRAFT DEED RESTRICTED EASEMENT FOR PLACEMENT OF CONTAMINATED SOIL

B 4

A 4

C 4

A 4

B 4

C 4

A 4

D 4

HATCHING LEGEND

CUT AREA
VOLUME=158,067 CY

BENEFICIAL REUSE AREA
VOLUME=168,000 CY

GRAPHIC SCALE

200 0 100 200 400

1 inch = 200 ft.

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SIERRA REFLECTIONS
COMMON OPEN SPACE TENTATIVE MAP

DRAFT REMEDIAL ACTION PLAN

ST. JAMES PARKWAY

NEVADA

WASHOE COUNTY

JOB NO.	21126.02
DESIGNED BY	NDJ
CHECKED BY	KM
DATE	9/8/25

SHEET EX1

OF 4

Q:\NV-RENO-CF\Projects\Projects\21126.02\Dwg\ENGR\EXHIBITS\CAP - RAP EXHIBITS\DRAFT RAP EXHIBIT.dwg NJAMES 9/5/2025 9:20 AM

AREA OF 8' CAP

AREA OF 8' CAP

AREA OF 8' CAP

AREA OF 8' CAP

AREA OF 8' CAP

HATCHING LEGEND

AREA WHERE CONTAMINATED SOIL WILL RECEIVE 8' CAP OF CLEAN FILL

GRAPHIC SCALE

200 0 100 200 400

1 inch = 200 ft.

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SIERRA REFLECTIONS
COMMON OPEN SPACE TENTATIVE MAP

DRAFT REMEDIAL ACTION PLAN

ST. JAMES PARKWAY

NEVADA

WASHOE COUNTY

JOB NO.	21126.02
DESIGNED BY	NDJ
CHECKED BY	KM
DATE	9/8/25

SHEET EX2 OF 4

Q:\NV-RENO-CF\Projects\Projects\21126.02\Dwg\ENGR\EXHIBITS\CAP - RAP EXHIBITS\DRAFT RAP EXHIBIT.dwg NJAMES 9/5/2025 9:22 AM

PROPOSED LIFT STATION
RIM=±4802.94
IE IN=±4793.30
NO MITIGATION REQUIRED

PROPOSED SSMH
RIM=±4801.59
IE IN=±4794.71
IE OUT=±4794.61
NO MITIGATION REQUIRED

UTILITY DEPTH NOTES

1. PROPOSED SEWER AT LIFT STATION WILL HAVE A MAXIMUM DEPTH OF ±9.64', BUT LIES OUTSIDE AREAS WITH CONTAMINATION LEVELS THAT REQUIRE MITIGATION.
2. ALL PROPOSED SANTIARY SEWER AND STORM DRAIN IN AREAS WITH CONTAMINATION LEVELS REQUIRING MITIGATION HAS A MAXIMUM DEPTH OF 6' AND ANY CONTAMINATED SOIL IN THESE AREAS IS BEING RELOCATED AND REPLACED WITH CLEAN FILL.
3. ALL PROPOSED WATER IN AREAS WITH CONTAMINATION LEVELS REQUIRING MITIGATION HAS A MAXIMUM DEPTH OF 4' AND ANY CONTAMINATED SOIL IN THESE AREAS IS BEING RELOCATED AND REPLACED WITH CLEAN FILL.

SAMPLING LEGEND (BORINGS 0–4')

- REMOVED FROM SAMPLING PLAN
- BELOW RESIDENTIAL ACTION LEVEL OF 11 mg/Kg
- ABOVE RESIDENTIAL ACTION LEVEL OF 11 mg/Kg
- ABOVE COMMERCIAL ACTION LEVEL OF 46 mg/Kg
- SAMPLE LOCATION AND RESULT — X.XX

GRAPHIC SCALE

100 0 50 100 200

1 inch = 100 ft.

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SIERRA REFELECTIONS
COMMON OPEN SPACE TENTATIVE MAP

DRAFT REMEDIAL ACTION PLAN

ST. JAMES PARKWAY

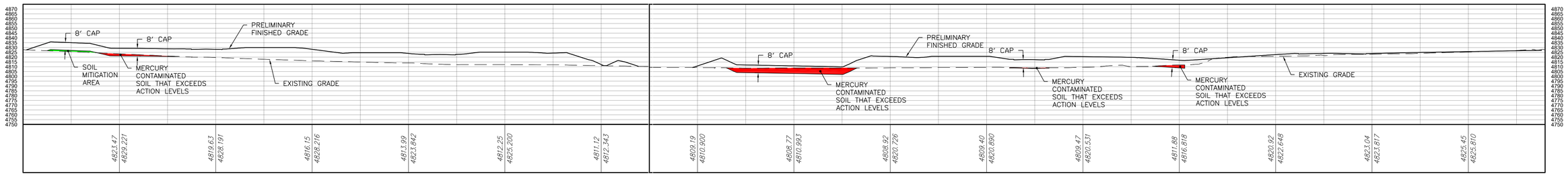
NEVADA

WASHOE COUNTY

JOB NO.	21126.02
DESIGNED BY	NDJ
CHECKED BY	KM
DATE	9/8/25

SHEET EX3

OF 4



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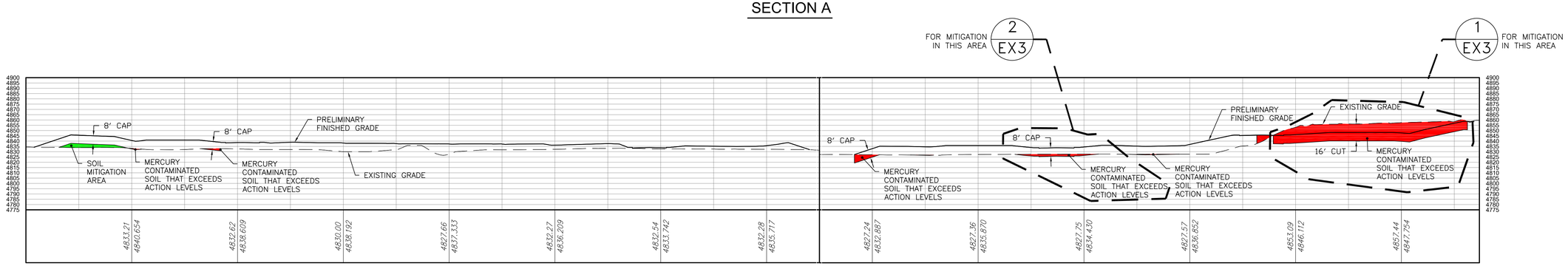

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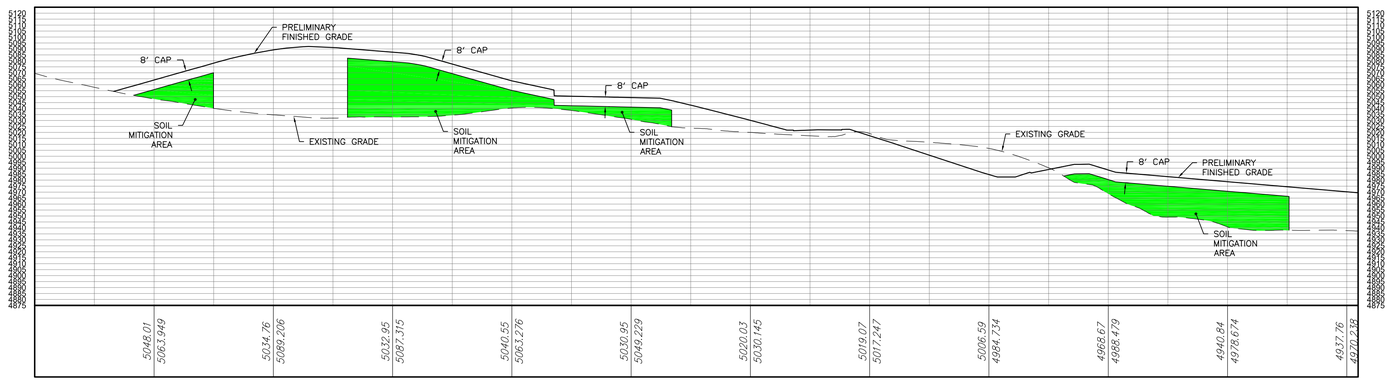

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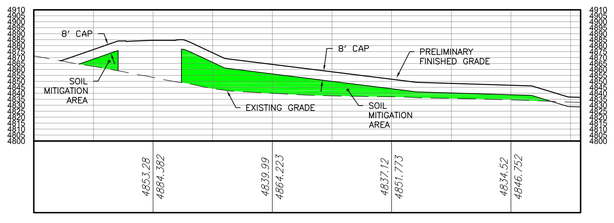

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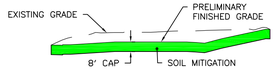

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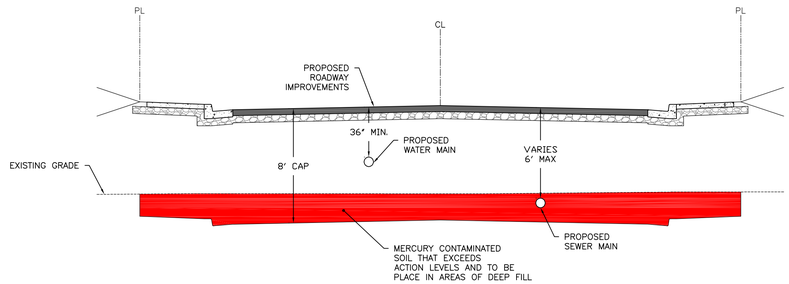

DETAIL 2

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SIERRA REFELECTIONS
COMMON OPEN SPACE TENTATIVE MAP

DRAFT REMEDIAL ACTION PLAN

ST. JAMES PARKWAY

NEVADA

WASHOE COUNTY

JOB NO.	21126.02
DESIGNED BY	NDJ
CHECKED BY	KM
DATE	9/8/25

SHEET EX4

OF 4

SIERRA REFLECTIONS

COMMON OPEN SPACE TENTATIVE MAP

EROSION CONTROL PLAN

GRAPHIC SCALE

140 0 70 140 280

1 inch = 140 ft.

GENERAL NOTES

1. TEMPORARY & PERMANENT BMP'S ARE SHOWN SCHEMATICALLY AT THIS TIME. AT TIME OF FINAL MAP PLANS SPECIFIC EROSION CONTROL PLANS WILL BE ISSUED FOR EACH CONSTRUCTION PHASE.

STORMWATER QUALITY NOTES

A. IN CASE OF EMERGENCY CALL GENERAL CONTRACTOR.

B. A STANDBY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES. NECESSARY MATERIALS SHALL BE AVAILABLE ON-SITE AND STOCKPILED AT APPROVED LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES OR TO REPAIR DAMAGED EROSION CONTROL MEASURES.

C. AFTER A RAINSTORM, ALL SILT AND DEBRIS SHALL BE REMOVED FROM CHECK BERMS AND DESILTING FACILITIES. GRADED SLOPE SURFACE PROTECTION MEASURES DAMAGED DURING THE RAINSTORM SHALL ALSO BE REPAIRED.

D. FILL SLOPES AT THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE TOP OF THE SLOPE AT THE CONCLUSION OF EACH WORKING DAY.

E. A SIX FOOT (6') HIGH PERIMETER FENCE OR A TWENTY-FOUR (24) HOUR GUARD SHALL BE POSTED ON THE SITE WHENEVER THE DEPTH OF WATER IN A FACILITY EXCEEDS EIGHTEEN INCHES (18').

BMP NO.	BMP NAME	MAP SYMBOL
SC-8	CONSTRUCTION SITE ENTRANCES AND EXITS	
DP-3	SAND BAG BARRIERS (STORM DRAIN INLET PROTECTION)	&
GM-2	STOCK PILE MANAGEMENT	SM SM
GM-5	STREET SWEEPING	SWEEP
GM-8	VEHICLE AND EQUIPMENT MAINTENANCE AND FUELING	VEF
GM-9	HANDLING AND DISPOSAL OF CONCRETE AND CEMENT	CWM
GM-10	MATERIAL DELIVERY, HANDLING, STORAGE, AND USE	MS
SC-5	SILT FENCE (MAY BE ATTACHED TO TEMP. CONSTRUCTION FENCE.	
SC-1	FIBER ROLLS (WATTLES)	FR FR

SIERRA REFLECTIONS

COMMON OPEN SPACE TENTATIVE MAP

EROSION CONTROL PLAN

WASHOE COUNTY NEVADA

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JOB NO: 21126.02 DATE: 09-08-2025

SHEET C6.0 OF 47

APPENDIX B

Materials Handling Plan

Material Handling Plan

SIERRA REFLECTIONS SUBDIVSION
Washoe County, NV

Prepared for:
World Properties Inc.
Joy Lake Road
Reno, NV 89511

and

Northern Nevada Public Health
Environmental Health
Attn: Wesley Rubio
1001 E Ninth Street, Bldg. B
Reno, NV 89512

Prepared By:
UES
6995 Sierra Center Parkway
Reno, Nevada 89511

September 5, 2025
Project No. A23173.00128

Table of Contents

FIGURES

APPENDICIES

1.0 INTRODUCTION

On behalf of World Properties Inc., UES Professional Solutions 30, LLC (UES) has prepared this Material Handling Plan (MHP) to support the Sierra Reflections Subdivision (Site) located in Washoe County, Nevada. The Site is identified as Washoe County Assessor Parcel Numbers (APNs) 046-080-40, 046-090-09, 046-090-01, 046-060-45, 046-090-10, 046-090-04, 046-060-47, 046-090-11, 046-090-05, 046-060-55 046-090-12, 046-090-06, 046-100-02, 046-090-13, 046-090-07, 046-100-03, 046-090-14, 046-090-08, 046-100-04, 046-090-15, 046-090-18, 046-100-07, 046-090-16, 046-090-23, 046-100-10, 046-090-17, 046-090-24, 046-090-25, and 046-090-26. The location of the Site is indicated in **Figure 1**.

UES has prepared this MHP to provide the minimum requirements for proper management of soil containing mercury above the residential and commercial action levels which is associated with legacy gold milling activities from the historic Comstock Lode mining era and naturally occurring sources in the area. It should be noted that while concentrations of arsenic exceeding regulatory action levels were found across the Site, they are within background ranges for the region and therefore not considered in this MHP except for sample location B49 discussed further in Section 2.2.

This MHP is intended to provide the minimum requirements for soil handling and stockpiling at the Site. ***Prior to mass grading, a site-specific materials handling plan will be developed by the grading contractor and provided to the NNPH and Washoe County for review. The site-specific plan will include temporary soil staging locations, phasing plan in relation to location of work, and specific best management practices (BMP) to be followed and used to protect stockpiled soil if they differ from those outlined in this MHP. The Site-Specific Materials Handling Plan will be submitted to the NNPH for review at least 30 days prior to commencement of site grading activities.***

2.0 BACKGROUND

2.1 DEVELOPMENT INFORMATION

The Site is planned for development as a residential community by World Properties Inc. named Sierra Reflections Subdivision. Mercury-impacted soil associated with the Carson River Mercury Superfund Site (CRMS) is known to exist in the area of the Site. The EPA draft Carson River Mercury Superfund Site map dated March 6, 2018, and the NDEP Carson River Mercury Superfund Site Risk Area Boundaries map dated January 19, 2012, both depict the Site as located within Operable Unit 1 (OU-1) of the CRMS. The CRMS Locations of Risk Area Boundaries map dated April 20, 2011, identifies the Site as potentially containing high level risk zones associated with Steamboat Creek and the Temelic Mill Site which is mapped on the northeastern portion of the Site. In addition to the areas shown to be in the CRMS, areas that were historically flood-irrigated and/or within the 100-year flood plain could reasonably be expected to be impacted. Based on aerial photographs reviewed during a Phase I Environmental Site Assessment (ESA) conducted by UES (formerly McGinley and Associates, Inc.) in January 2023, the northeast portion of the Site appears to have been flood-irrigated with water from Steamboat Creek since at least 1939. As such, a recognized environmental conditions (REC) was identified and multiple ESAs were conducted to assess for mercury within the soil at the Site.

2.2 PREVIOUS ESA ACTIVITIES

In April and May 2023, UES conducted a screening level soil sampling event at the Site to provide baseline knowledge of existing site conditions to evaluate decisions for future development and/or sampling activities. Detectable mercury concentrations were reported in all 43 of the collected soil samples ranging from 0.079 mg/kg to 116 mg/kg. In general, samples with elevated concentrations of mercury were located in the flood irrigated areas in the northeastern portion of the Site and in the vicinity of Steamboat Creek.

Between January and March 2024, soil sampling activities were conducted by UES to characterize and delineate mercury, lead, and arsenic impacts at the Site prior to approval of development plans. The Site was divided into three zones as differing levels of impacts were expected based on location, historical use, and potential for flooding and/or flood irrigation. Mercury analytical results for samples collected in the 0-4' horizon within the meadow (Zone 1) ranged from 0.09 mg/kg to 181 mg/kg. Mercury analytical results for samples collected in the 4-8' horizon within the meadow (Zone 1) ranged from 0.0225 mg/kg to 79.7 mg/kg. Mercury analytical results for samples collected from the Steamboat Creek bank (Zone 2) ranged from 0.0392 mg/kg to 311 mg/kg. This is consistent with known mercury impacts from the CRMS. Mercury analytical results for samples collected from areas above the flood zone which were not irrigated with Steamboat Creek water (Zone 3) ranged from 0.0269 mg/kg to 1.4 mg/kg, well below the residential action level of 7.1 mg/kg. All samples analyzed for arsenic and lead were consistent with naturally occurring background concentrations within the region with the exception of one sample.

The sample collected from 0-4' bgs at B49, collected from the former mill site, had elevated concentrations of arsenic (308 mg/kg) and lead (556 mg/kg) well above the Site average and EPA residential RSLs. Lead and arsenic are known by products of milling techniques. Based on additional sampling in 2025, the affected area is limited and will be mitigated with the same methodology as mercury impacted soils.

In March 2025, additional soil sampling activities were conducted to further characterize and delineate mercury, lead, and arsenic impacts within Zone 1 at the Site. Detectable concentrations of mercury were reported in 25 of the 29 samples collected, with concentrations ranging from 0.109 mg/kg (B234) to 56.0 mg/kg (B225). Of the 29 samples collected, 11 exceeded the residential action level for mercury (7.1 mg/kg) and two exceeded the industrial action level for mercury (30 mg/kg). The two samples analyzed for arsenic and lead reported concentrations of arsenic with the background range for the Site and concentrations of lead below the residential action level of 200 mg/kg. The additional site characterization sampling event achieved complete delineation of the impacted areas. Based on the characterization activities, arsenic and lead are not considered contaminants of concern under the Remedial Action Plan (RAP) prepared for the development or this MHP (see Section 3).

2.3 CONCEPTUAL SITE MODEL

The mercury, arsenic, and lead impacted soil at the Site is related to legacy gold milling activities from the historic Comstock Lode mining era. Processing of the ore at Comstock's gold mills generally involved comminution of the ore with stamp mills, creating a slurry, and adding mercury to form an amalgam with the gold and silver. The gold and silver were later separated from the mercury using a distillation process and the mercury was reused. After about 1900, cyanide leaching and flotation processes replaced mercury amalgamation. The milling process may also have concentrated arsenic and lead in the processed materials (tailings). The historical mills that impacted Steamboat Creek were located on Galena Creek and in Washoe

City, near Washoe Lake. The Temelic Mill site is also located on the Site. Fluvial transport of the metals is the primary means by which the metals were mobilized in Steamboat Creek. The mercury, arsenic, and lead impacted material is co-located and generally contained in the stream channel of Steamboat Creek, but decades of flood-irrigation at the Site with water from Steamboat Creek and flood events in the area allowed mercury sediment to be deposited on the Site. As such, mercury-impacted soil or soil with elevated concentrations of arsenic and lead are not expected to exist outside of the flood-irrigated lands and/or the 100-year floodplain. Additionally, due to alluvial transport, vertical migration of mercury is limited, as mercury gets caught up in the soil particles as it moves downward. As such, elevated concentrations of mercury are not anticipated in areas where surficial samples were below action levels and overall mercury concentrations will decrease significantly with depth.

3.0 REMEDIAL ACTION LEVELS

Pursuant to direction and discussion with the Nevada Division of Environmental Protection (NDEP) and the NNPH, action levels at the Site will follow the EPA Regional Screening Levels (RSLs). The EPA RSLs for mercury, lead, and arsenic are summarized in the table below.

COCs	EPA RSL – Residential	EPA RSL – Commercial
Mercury	7.1 mg/kg	30 mg/kg
Lead	200 mg/kg	800 mg/kg
Arsenic	0.68 mg/kg	3.0 mg/kg

As indicated in UES's September 27, 2021, *South Truckee Meadows Regional Arsenic Background Levels* report, regional background arsenic concentrations in soils appear to range from 1.8 mg/kg to 320 mg/kg. While arsenic concentrations in soil samples collected for the Sierra Reflections Subdivision appear to be elevated when compared to the EPA action level of 0.69 mg/kg for residential scenarios, these soil sample concentrations are within the known background range for arsenic within this region. In general, soil with elevated concentrations of arsenic is known to be collocated with elevated mercury concentrations in this region. Therefore, the proposed RAP for mercury impacted soils would inherently address elevated arsenic concentrations in the low-lying areas.

4.0 SCOPE OF WORK

A RAP has been written for this development project which will be executed under the regulatory oversight of the Northern Nevada Public Health (NNPH).

Remedial action will focus on protecting public health by removing and/or capping mercury impacted soils such that shallow soils do not contain mercury above the residential action level of 7.1 mg/kg and roadways do not contain mercury above the industrial/construction action level of 30 mg/kg.

In general, the RAP for this Site includes moving impacted soil from the meadow area to beneficial reuse areas which require fill as part of site grading activities. Impacted soil used as beneficial fill in other parts of the Site will be capped with a minimum of eight feet of clean material. Additionally, as a conservative measure, areas where soil was removed in Zone 1 will be capped with eight feet of clean material. This

cap will prevent contact with potentially impacted soil following Site development. The remedial action site grading plans are provided in **Appendix A.** These plans outline the anticipated cut and fill locations. Exhibit EX1 outlines the anticipated extent of cut and locations for beneficial reuse (fill), exhibit EX2 indicates where the eight-foot clean cap will be applied, Exhibit EX3 provides information on buried utility locations and depths, and Exhibit EX4 provides cross sections for select areas of interest. As indicated in the Exhibits in Appendix A and in Figures 2A and 2B, impacted areas within the meadows will be excavated and capped with clean material.

5.0 SOIL MANAGEMENT

All soil excavated from the impacted soil noted in Zone 1, estimated to include approximately 160,000 cubic yards, shall be excavated and placed in beneficial reuse areas identified in the grading plans in Appendix A. Excavated soil will be transported to the beneficial reuse areas concurrently with excavation to prevent double handling, migration via wind, stormwater, and/or confusion regarding what soil can be placed where. All contaminated soil excavation will take place prior to beginning other grading efforts for the Site (with the exception of preparing the beneficial reuse areas), in order to keep mercury laden soil segregated from non-impacted soils.

6.0 STOCKPILE MANAGEMENT

If the excavated soil is not immediately placed in the beneficial resuse areas, it will be stockpiled on visqueen away from areas with surface drainage. Stockpiles will be limited in size. If stockpiles are to be left in place for more than 12 hours (i.e., overnight or during a precipitation/wind event), the stockpile shall be covered with an impermeable material (i.e., visqueen or plastic) and secured such that wind will not remove the covering, to prevent erosion from precipitation and wind events. Work which includes handling of impacted soil will cease should a major wind event take place and stockpiles will be covered as described above. Stockpiles shall be bermed in accordance with the Stormwater Pollution Prevention Plan (SWPPP) to prevent runoff during storm events. If stockpiles are to remain in place for more than 60-days, best management practices (BMPs) shall include, at minimum, wire backed silt fence, orange construction fencing and signage indicating that soils are only suitable for fill material in specified areas.

At least 30 days prior to mass grading, a site-specific materials handling plan will be developed by the grading contractor and provided to the NNPH and Washoe County for review. The site-specific plan will include soil staging locations, phasing plan in relation to location of work, and specific best management practices (BMP) to be followed and used to protect stockpiled soil if they differ from those outlined in this plan.

7.0 TRANSPORTATION ACTIVITIES

Trucks shall not enter the excavation area or track through soils known to be impacted with mercury. During transportation activities, mercury containing material shall be wetted thoroughly to prevent airborne exposure. Haul truck beds shall be covered with suitable cover during transport from the excavation location to the fill area. Haul trucks will comply with applicable traffic laws when transport is taking place on public roadways (not anticipated). All used BMP-derived waste (wattles, silt fence, etc.) shall be placed in appropriate waste containers, labeled, and treated as non-hazardous waste.

8.0 FINAL CAP

Following placement of the impacted fill materials, the beneficial reuse areas and excavated areas in Zone 1 shall be capped with at least eight feet of clean fill material. The cap is intended prevent direct human contact with impacted soil. Capping, confirmation sampling, and reporting are outlined in the Remedial Action Plan (RAP) prepared for this Site.

FIGURES

APPENDIX A

Remedial Action Grading Plans (to be included when MHP is a standalone document)

APPENDIX B

Erosion Control Plan (to be included when MHP is a standalone document)