

**PRELIMINARY GEOTECHNICAL
ENGINEERING REPORT**

for

BERRIMAN RANCH

APN 22-140-03 and 22-160-03

Nevada County, California

Prepared for:

Kent Holdings and Affiliates

P.O. Box 787

Solana Beach, California 92075

Prepared by:

Holdrege & Kull

792 Searls Avenue

Nevada City, California 95959

**Project No. 1746-02
December 13, 2006**



Project No. 1746-02

December 13, 2006

Kent Holdings and Affiliates
P.O. Box 787
Solana Beach, California 92075

Attention: Sandy Kahn

Reference: *Berriman Ranch*
APNs 22-140-03 and 22-160-03
Taylorville Road
Nevada County, California

Subject: *Preliminary Geotechnical Engineering Report*

Dear Mr. Kahn:

This report presents the results of our preliminary geotechnical engineering investigation for the proposed Berriman Ranch site on Taylorville Road in Nevada County, California. The approximate 120-acre property is located on a southwest-facing slope directly west of Taylorville Road and Highway 49, approximately a quarter mile south of the intersection of Highway 49 and McKnight Way. As currently proposed, the project will include the creation of individual residential lots, as well as associated access roads and subsurface utilities.

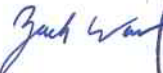
The preliminary findings presented in this report are based on a cursory surface reconnaissance at the site, review of selected geologic references, and our experience with subsurface conditions in the area. Based on our preliminary findings, our opinion is the project as currently proposed appears to be feasible from a geotechnical engineering standpoint. Furthermore, we should be retained to perform a design level investigation prior to construction to confirm the preliminary recommendations presented in this report and provide alternate recommendations, if appropriate, based on the subsurface conditions encountered.

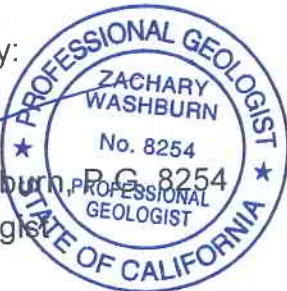
Please contact us if you have any questions regarding our observations or the preliminary recommendations presented in this report.

Sincerely,

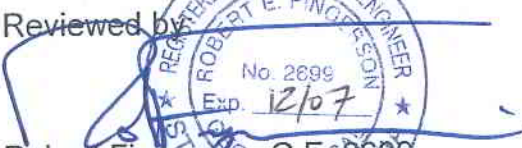
HOLDREGE & KULL

Prepared by:


Zack Washburn, P.G. 8254
Staff Geologist



Reviewed by:


Robert Fingerson, G.E. 2699
Senior Engineer



copies: 4 to Sandy Kahn / Kent Holdings and Affiliates
1 to Fred Oliver / Asset Property Group

F:\1 Projects\1746 Berriman Ranch\1746-02 PrelimGt\PrIm GTK.wpd

TABLE OF CONTENTS

1	INTRODUCTION	1
1.1	SITE DESCRIPTION	1
1.2	PROPOSED IMPROVEMENTS	1
1.3	SCOPE OF SERVICES	1
2	SITE INVESTIGATION	2
2.1	LITERATURE REVIEW	2
2.2	FIELD INVESTIGATION	4
2.2.1	Surface Conditions	4
2.2.2	Surface Water and Ground Water Conditions	5
3	LABORATORY TESTING	6
4	CONCLUSIONS	6
5	PRELIMINARY RECOMMENDATIONS	7
5.1	GRADING	7
5.1.1	Glory Hole Closure	7
5.1.2	Clearing and Grubbing	8
5.1.3	Preparation for Fill Placement	9
5.1.4	Fill Placement	9
5.1.5	Cut/Fill Slope Grading	10
5.1.6	Erosion Control	11
5.1.7	Subsurface Drainage	11
5.1.8	Surface Water Drainage	12
5.1.9	Construction Monitoring	12
5.2	FOUNDATION SYSTEMS	13
6	LIMITATIONS	13

FIGURES

Figure 1 Site Plan

APPENDICES

Appendix A Proposal

Appendix B Important Information About Your Geotechnical Engineering
Report (included with permission of ASFE, Copyright 2004)

1 INTRODUCTION

At the request of Sandy Kahn, Holdrege & Kull (H&K) performed a preliminary geotechnical engineering investigation for the proposed Berriman Ranch project site in Nevada County, California. The preliminary geotechnical investigation was performed in general accordance with the scope of services presented in our November 16, 2006 proposal for the project, a copy of which is included as Appendix A of this report. For your review, Appendix B contains a document prepared by ASFE entitled *Important Information About Your Geotechnical Engineering Report*, which summarizes the general limitations, responsibilities, and use of geotechnical reports.

1.1 SITE DESCRIPTION

The approximate 120-acre site is located on the southwest-facing slopes directly west of Taylorville Road and Highway 49, approximately a quarter mile south of the intersection of Highway 49 and McKnight Way. The Assessor's Parcel Numbers (APNs) for the site are 22-140-03 and 22-160-03. APN 22-140-03 consists of approximately 95 acres which lie north of the rectangular shaped, approximate 25-acre APN 22-160-03. The site is bordered by commercial development at McKnight Way on the north, by Wolf Creek to the west, and by rural residential and undeveloped property to the south and east. A site map showing the approximate property boundaries is attached as Figure 1.

1.2 PROPOSED IMPROVEMENTS

Our understanding of the project is based on our review of a November 2006 preliminary site plan prepared by SCO Planning and Engineering, Inc. We understand that, as currently proposed, the project may include construction of 147 single-family residences. Associated improvements would likely include construction of paved roads and driveways, underground utilities, and an onsite sewage treatment facility.

1.3 SCOPE OF SERVICES

To prepare this report, we performed the following scope of services:

- We reviewed selected geologic and soil survey literature.

- We performed a cursory surface reconnaissance of the site.
- Based on observations made during our site reconnaissance, the results of our literature review, and our experience with soil conditions in the area, we prepared this report to provide preliminary geotechnical engineering recommendations for the proposed improvements.

2 SITE INVESTIGATION

The following sections summarize our literature review and field reconnaissance.

2.1 LITERATURE REVIEW

The property is located in the Sierra Nevada Foothills, on the western side of the Sierra Nevada geomorphic province. The Sierra Nevada province is an elongate, north-west trending structural block that is tilted upward to form a steep scarp above the adjacent Basin and Range province to the east. The western slope of the Sierra Nevada dips gently westward, and extends beneath sediment of the Great Valley province. Sediment within the Great Valley is derived from continual uplift and erosion of the Sierra Nevada.

According to the Geologic Map of Western Nevada County, California (California Division of Mines and Geology, 1990), the site is underlain by Cretaceous-aged quartz diorite. The Cretaceous period occurred between 144 to 65 million years before present.

We reviewed California Geological Survey Open File Report 96-08, Probabilistic Seismic Hazard Assessment for the State of California, and the 2002 update entitled California Fault Parameters. The documents indicate the project site is located within the Foothills Fault System. The Foothills Fault System is designated as a Type C fault zone, with low seismicity and a low rate of recurrence. The 1997 edition of California Geological Survey Special Publication 43, Fault Rupture Hazard Zones in California, describes active faults and fault zones (activity within 11,000 years), as part of the Alquist-Priolo Earthquake Fault Zoning Act. The map and document indicate the site is not located within an Alquist-Priolo active fault zone.

We reviewed the *Soil Survey of Nevada County, California, Western Part* prepared by the USDA Soil Conservation Service (1975; reissued 1992). The soil survey map indicated that onsite soil likely consists of Musick sandy loam on 5 to 15 percent slopes and Musick-Rock outcrop complex on 5 to 50 percent slopes

According to the soil survey, the Musick sandy loam typically consists of brown to reddish brown, sandy loam, light loam and loam from the surface to a depth of 25 inches. From approximately 25 to 98 inches, the soil consists of yellowish red and red heavy clay loam and reddish yellow and yellow loam. Weathered granodiorite is typically encountered at a depth of approximately 98 inches.

The Musick sandy loam was described as 18 to 35 percent mixed clay soil with moderately slow permeability and moderate erosion potential. Corrosion potential, acid reaction, and shrink-swell potential were also described as moderate. The Musick-Rock outcrop complex was described as 10 to 25 percent rock outcrop with moderate to high erosion hazard and medium to rapid runoff.

We also reviewed a December 19, 2002 letter prepared by H&K entitled *Summary of Percolation Testing, Soil Sampling and Laboratory Test Results*, which described the results of preliminary observations and testing performed during November 2002 to evaluate apparent mine excavations and the potential for wastewater disposal on the project site.

During our November 2002 site work, we observed two apparent glory holes in the northwestern portion of the site, east of the barrier at the end of Picadilly Lane. The glory holes ranged from 3 to 5 feet in depth and were surrounded by waste rock tailings. H&K obtained five discrete soil samples from a possible waste rock stockpile located near the apparent glory holes. Samples were analyzed for total arsenic and lead using United States Environmental Protection Agency (EPA) Test Method 6010B. All lead concentrations detected in the samples were well below the Preliminary Remediation Goals. Arsenic was not detected in the five samples analyzed.

We also excavated 11 trenches to determine the dominant soil types onsite and to determine the suitability of the soil conditions for construction of onsite sewage disposal systems for single family homes and clustered housing. Trenches were excavated to maximum depths of 7.5 to 8 feet. Percolation tests were then performed in accordance with the percolation test guidelines recommended by the

Nevada County Department of Environmental Health (NCDEH). The soil observations and percolation test results indicated that wastewater disposal is feasible on portions of the project site.

2.2 FIELD INVESTIGATION

We performed our site reconnaissance on November 21 and 27, 2006 to observe existing surface conditions at the project site.

2.2.1 Surface Conditions

At the time of our site visit, the majority of the property was undeveloped, with the exception of an existing residence, barn and associated outbuilding located in the eastern portion of the site. In addition, a rough graded dirt road extended from near the existing residence southward toward Wolf Creek. Numerous smaller logging roads and skidder trails were observed on APN 22-160-03 and the western margin of APN 22-140-03. These areas containing the logging roads appeared to have been logged fairly recently, possibly in the last ten years.

The site topography generally slopes to the southwest. In the northern, central, and eastern portions of the site, the surface sloped gently to the southwest at gradients between 5 and 15 percent. In the western and southern portions of the site, the topography sloped moderately to steeply towards Wolf Creek, with gradients ranging from 20 to 40 percent.

The ground surface throughout the majority of the site was generally covered with pine needle duff, leaves, and/or dense undergrowth. However, limited exposures of the surface soil and rock were observed in the rough graded dirt road in the central and southern portions of the site. The surface soil exposed in the roadway consisted of yellowish brown, medium dense, sandy silt. We also observed cobbles of granodiorite exposed in the previously graded access road near the confluence of the two seasonal drainages in the northern portion of APN 22-160-03. We observed boulders and rock outcrop in the northeastern portion of the site.

A few piles of woody debris up to 100 feet in diameter and 10 feet in height were observed in the clearing south of the existing residence. Blackberry canes were growing in the piles.

In the northern portion of the site, a seasonal drainage trended southwest to its confluence with Wolf Creek. Another seasonal drainage was observed a few hundred feet south of the existing residence. This drainage also trended southwest to its confluence with Wolf Creek in the southern portion of the site. A third seasonal drainage was observed near the northeast corner of APN 22-160-03. This drainage originates offsite, flows southwest onto APN 22-160-03, and joins the drainage that was observed a few hundred feet south of the existing residence. This third drainage had steep, irregularly eroded banks and was incised up to 15 feet below the surrounding topography. These features are commonly associated with historic mining activities.

The two glory holes that were identified during our previous investigation in 2002 were not visible at the time of our recent site visit. Recent clearing of brush and timber harvest activities appear to have obscured the glory holes. Based on our previous observation and our review of the proposed site plan, we anticipate that the past excavations were located in the area of proposed Lots 62, 63, and 64. In addition, our experience in the area has revealed the presence of undocumented historic mining excavations in the McKnight Way area.

We observed an area of saturated ground and daylighting seepage east of proposed Lot 55 in an area of proposed road grading. We also observed what appeared to be an abandoned irrigation ditch in the northwestern corner of APN 22-160-03 (Figure 1).

We observed existing fill to an estimated maximum depth of 6 feet for the culvert crossing in the northern portion of APN 22-160-03. In the southern portion of the site, a log deck contained existing fill to an estimated depth 6 feet and logging roads contained fill to an estimated maximum depth of 8 feet.

2.2.2 Surface Water and Ground Water Conditions

We observed flowing water in the southernmost seasonal drainage, in the northern portion of APN 22-160-03 and saturated ground in the area east of proposed Lot 55. We anticipate that seepage will be encountered in excavations, particularly during or after the rainy season.

3 LABORATORY TESTING

Laboratory testing was not included in the scope of our preliminary geotechnical engineering investigation. Laboratory testing would typically be performed as part of a design-level geotechnical engineering investigation for the project.

4 CONCLUSIONS

The following conclusions are based on our field observations and our experience in the area.

- Based on the results of our preliminary geotechnical investigation, our opinion is that the project is feasible from a geotechnical standpoint.
- We encountered existing fill during our site reconnaissance generally associated with previously graded access roads. Existing fill should not be relied upon to support proposed improvements without testing and evaluation. If existing fill is encountered, we anticipate that the most economical approach to deal with areas of existing fill would be to overexcavate, moisture condition, and recompact during grading for the proposed improvements.
- Based on our site observations and our experience in the area, we anticipate that potentially expansive clay soil may be encountered in isolated areas, particularly near the soil/rock interface. Expansive clay soil is typically encountered in this area in thin layers which can often be mitigated either through overexcavation and mixing with granular material during grading, or by deepening proposed footings through the clay layer into underlying, more competent soil or weathered rock. Predominantly fine grained soil encountered onsite should be sampled and tested to determine expansion potential.
- Based on our previous observation of glory holes near Picadilly Lane and mining features identified on adjacent properties, we anticipate that mine shafts, tunnels, and other mining related features will likely be encountered during site development, and will need to be addressed on a case-by-case basis. Furthermore, the two glory holes observed during our 2002 site visits will need to be located during site preparation and grading, observed by a

representative of Holdrege & Kull, and mitigated in accordance with the recommendations presented by the project geotechnical engineer.

- We anticipate that areas of seepage will likely be encountered during grading onsite, particularly during the rainy season and/or in excavations which reveal the surface soil/weathered rock contact. Preliminary recommendations regarding subsurface drainage are presented in this report.
- Based on the site geology and the presence of rock outcrop we anticipate that relatively shallow, resistant rock may be encountered in portions of the site during grading or excavation for utilities. Preliminary recommendations for resistant rock are presented in the following sections. Fill material resulting from excavation onsite may contain significant gravel and oversized rock that will require specific recommendations for use as fill. General recommendations for placement of rock fill and oversized material are presented in the following sections.

5 PRELIMINARY RECOMMENDATIONS

The following preliminary geotechnical engineering recommendations are based on our understanding of the project as currently proposed, our literature review, our field observations during surface reconnaissance, and our experience in the area. The recommendations are preliminary, and are provided for planning purposes only. The preliminary conclusions and recommendations in this report should be verified by a design-level geotechnical engineering investigation and/or observation during grading.

5.1 GRADING

5.1.1 Glory Hole Closure

The glory holes that we observed in 2002 appeared to be shallow surface depressions. Those features should be regraded if they are located within 100 feet of proposed building footprints or within 40 feet of roads, pedestrian pathways, utilities, or other proposed improvements. Assuming that the glory holes are confirmed to be relatively shallow features, (i.e., less than approximately 15 feet in depth) they will need to be located and overexcavated to the depth necessary to

reveal competent native soil or weathered rock. Following the removal of loose soil and debris, the resulting excavation should be backfilled with compacted soil. The soil should be placed in 8-inch loose lifts and compacted to a minimum of 90 percent compaction based on ASTM D1557. As an alternative to the use of compacted fill, controlled density backfill such as a three-sack, sand-cement slurry may be used.

Deeper excavations may require structural closure through the use of reinforced concrete slabs, concrete plugs, or collapse and fill placement. The actual closure methods used will need to be determined by the project geotechnical engineer following observation of the individual features.

Glory holes more than 100 feet from proposed building footprints or 40 feet from proposed improvements do not necessarily need to be backfilled with compacted fill. However, all apparent mining excavations encountered during site preparation, grading, and construction onsite should be reviewed in an attempt to determine the potential hazards, if any, and provide recommended mitigation measures, if appropriate.

5.1.2 Clearing and Grubbing

Areas proposed for fill placement, paved areas, and building pads should be cleared and grubbed of vegetation and other deleterious materials as described below.

1. Strip and remove organic surface soil containing shallow vegetation and any other deleterious materials. This organic soil can be stockpiled onsite and used in landscape areas, but is not suitable for use as fill. The actual depth of stripping may vary across the site. Areas of deeper organic surface soil may be encountered in drainage swales and low lying areas.
2. Overexcavate any loose fill, debris and/or other onsite excavations to underlying, competent material. Possible excavations include exploratory trenches excavated by others, mantles or soil test pits, and tree stump holes.
3. Remove all rocks greater than 8 inches in greatest dimension (oversized rock) by scarifying to a depth of 12 inches or to resistant weathered rock, if shallower, in proposed building pads and areas to support pavement, slabs-

on-grade, and other flatwork. Oversized rock should be placed in deep fill per the recommendations of the project geotechnical engineer, stockpiled for later use in landscape areas, drainage features, or stacked rock walls, or removed from the site.

4. Vegetation, tree stumps and exposed root systems, and any other deleterious materials and oversized rocks not used in landscape areas should be removed from the site.

5.1.3 Preparation for Fill Placement

Upon completion of site clearing, grubbing and overexcavation, the exposed native soil should be observed by a representative of our firm prior to placement of fill at the project site. Fill placed on slopes steeper than 5:1, H:V, should be benched into the existing slope to allow placement of fill in horizontal lifts.

5.1.4 Fill Placement

Fill should be placed according to the following guidelines:

1. Material used for fill construction should consist of uncontaminated, predominantly granular, non-expansive native soil or approved import soil. Rock used in fill should be no larger than 8 inches in diameter. Rocks larger than 8 inches are considered oversized material and should be placed in deep fill per the recommendations of the project geotechnical engineer, stockpiled for use in landscape areas or rock walls, or removed from the site.
2. Oversized material may be windrowed in deeper fill under the observation of the project geotechnical engineer. The windrows should be separated by at least one equipment width. Compacted fill should be worked into the sides of each windrow, and remaining voids should be filled with smaller rock. If the oversized material is to be incorporated into a rock fill that does not permit density testing by nuclear methods, the contractor should prepare a test fill during initial fill placement for observation and testing. The means and methods of subsequent fill placement will be evaluated for conformance with the approved test fill.

3. Imported fill material should be predominantly granular, non-expansive and free of deleterious or organic material. If imported material is required to grade the site, it should be submitted to H&K for approval and laboratory analysis at least 72 hours prior to import to the site.
4. Clay soil, if encountered, may be used as fill if mixed with granular soil at a ratio determined by the project geotechnical engineer.
5. Fill should be uniformly moisture conditioned and placed in maximum 8-inch thick loose lifts (layers) prior to compacting.
6. The moisture content, density and relative compaction of fill should be evaluated by our firm during construction.

5.1.5 Cut/Fill Slope Grading

1. Cut and fill slopes should generally be no steeper than 2:1, H:V. Based on our experience in the area, steeper cut slope gradients may be feasible in areas that have significant rock structure. Steeper cut slope gradients must be verified based on the results of laboratory testing and observation of slope conditions.
2. Fill slopes should be constructed by overbuilding the slope face and then cutting it back to the design slope gradient. Fill slopes should not be constructed or extended horizontally by placing soil on an existing slope face and/or compacted by track walking.
3. Benching during placement of fill on an existing slope must extend through loose surface soil into firm material, and be performed at intervals such that no loose soil is left beneath the fill.
4. Our observation of rock outcrop in the northeastern portion of the site and our experience in the area has shown that areas of moderately or slightly weathered rock that is difficult to trench with conventional trenching equipment may be encountered during grading or trenching. Pre-ripping, blasting, or splitting may be required in these areas. The scope of a future design level investigation should include excavation of exploratory trenches along

proposed road and utility trench alignments to allow observation of subsurface soil and rock conditions.

5.1.6 Erosion Control

Graded portions of the site should be seeded following grading to allow vegetation to become established prior to and during the rainy season. In addition, grading that results in greater than one acre of soil disturbance or in sensitive areas may require the preparation of a storm water pollution prevention plan. As a minimum, the following controls should be installed prior to and during grading to reduce erosion.

1. Prior to commencement of site work, fiber rolls should be installed down slope of the proposed area of disturbance to reduce migration of sediment and small rocks from the site.
2. Soil exposed in permanent slope faces should be hydroseeded or hand seeded/strawed with an appropriate seed mixture compatible with the soil and climate conditions of the site as recommended by the local Resource Conservation District.
3. Following seeding, jute netting or erosion control blankets should be placed and secured over graded slopes steeper than 2:1, H:V, to keep seeds and straw from being washed or blown away. Tackifiers or binding agents may be used in lieu of jute netting.
4. Surface water drainage ditches should be established as necessary to intercept and redirect concentrated surface water away from cut and fill slope faces. Under no circumstances should surface water be directed over slope faces. The intercepted water should be discharged into natural drainage courses or into other collection and disposal structures.

5.1.7 Subsurface Drainage

If grading is performed during or immediately following the rainy season, seepage will likely be encountered. If groundwater or saturated soil conditions are encountered during grading, we anticipate that dewatering may be possible by gravity or by installation of sump pumps in excavations.

Control of subsurface seepage at the base of fill areas can typically be accomplished by placement of an area drain. Underlying, saturated soil is typically removed and replaced with free draining, granular drain rock enveloped in geotextile fabric. Fill soil can be placed after placing the granular rock to an elevation that is higher than the encountered groundwater. H&K should review proposed drainage improvements with regard to the site conditions prior to construction.

5.1.8 Surface Water Drainage

Proper surface water drainage is important to the successful development of the project. We recommend the following measures to help mitigate surface water drainage problems:

1. Slope final grade adjacent to structural areas so that surface water drains away from building pad finish subgrades at a minimum 2 percent slope for a minimum distance of 10 feet.
2. Compact and slope all soil placed adjacent to building foundations such that water is not retained to pond or infiltrate. Backfill should be free of deleterious material.
3. Direct downspouts to a solid collector pipe which discharges flow to positive drainage.

5.1.9 Construction Monitoring

Construction monitoring includes review of plans and specifications and observation of onsite activities during construction as described below.

1. We should be retained to review the final grading plans prior to construction to determine whether our recommendations have been implemented, and if necessary, to provide additional and/or modified recommendations.
2. We should be retained to perform construction monitoring during grading performed by the contractor to determine whether our recommendations have been implemented, and if necessary, provide additional and/or modified recommendations.

5.2 FOUNDATION SYSTEMS

Our preliminary opinion is that conventional shallow spread footings will be suitable for relatively lightly loaded, framed structures across much of the subject site. Footings should be founded on native, undisturbed soil, weathered rock or compacted and tested fill. Foundation design criteria and construction recommendations are typically provided as part of a design-level geotechnical engineering report.

Footings should be deepened through expansive clay soil, if encountered at the base of the footing excavations. Expansive clay soil is typically encountered in relatively thin layers near the soil/weathered rock interface.

Shallow, resistant rock may be encountered during construction which limits footing excavation. The presence of shallow rock within building footprints may require the use of rock anchors or dowels to provide uplift and sliding resistance. H&K can provide site specific anchor recommendations during construction if requested.

6 LIMITATIONS

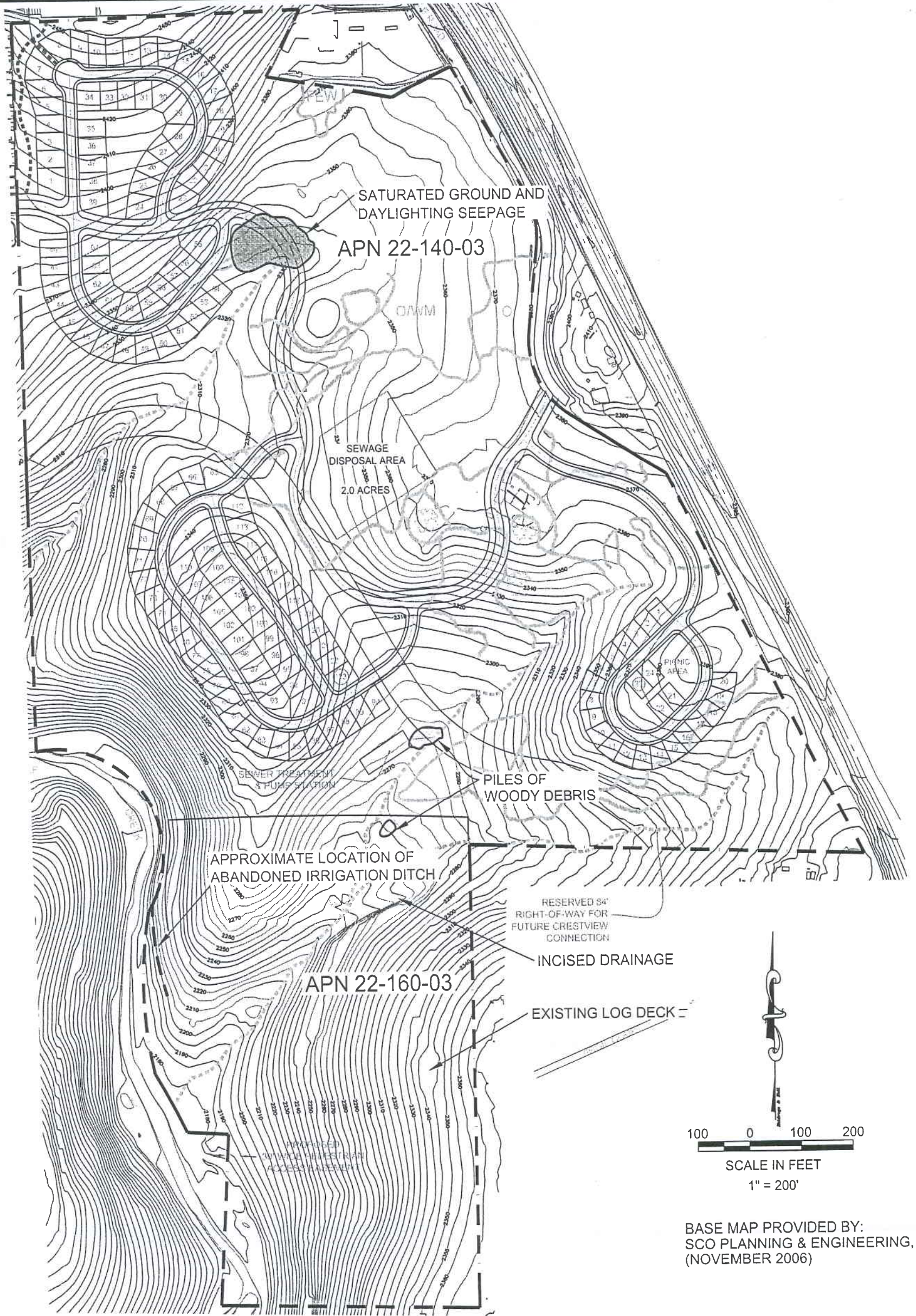
The following limitations apply to the findings, conclusions and recommendations presented in this report:

1. Our professional services were performed consistent with the generally accepted geotechnical engineering principles and practices employed in northern California. This warranty is in lieu of all other warranties, either expressed or implied.
2. These services were performed consistent with our agreement with our client. We are not responsible for the impacts of any changes in environmental standards, practices or regulations subsequent to performance of our services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report. This report is solely for the use of our client. Any reliance on this report by a third party is at the risk of that party.

3. If changes are made to the nature or design of the project as described in this report, then the conclusions and recommendations presented in this report should be considered invalid by all parties. Only our firm can determine the validity of the conclusions and recommendations presented in this report. Therefore, we should be retained to review all project changes and prepare written responses with regards to their impacts on our conclusions and recommendations. Subsurface investigation and laboratory testing will be required to develop design-level recommendations.
4. The analyses, conclusions and recommendations presented in this report are preliminary, based on site conditions as they existed at the time we performed our surface observations. The subsurface conditions should be confirmed by a design-level geotechnical investigation prior to construction.
5. Our scope of services did not include evaluating the project site for the presence of hazardous materials. Project personnel should be careful and take the necessary precautions should hazardous materials be encountered during construction.
6. The findings of this report are valid as of the present date. Changes in the conditions of the property can occur with the passage of time. The changes may be due to natural processes or to the works of man, on the project site or adjacent properties. In addition, changes in applicable or appropriate standards can occur, whether they result from legislation or the broadening of knowledge. Therefore, the recommendations presented in this report should not be relied upon after a period of two years from the issue date without our review.

FIGURES

Figure 1 Site Plan



SITE PLAN
BERRIMAN RANCH
NEVADA COUNTY, CALIFORNIA

1746-02-FIG1



HOLDREGE & KULL
CONSULTING ENGINEERS • GEOLOGISTS
792 SEARLS AVENUE
NEVADA CITY, CA 95959
(530) 478-1305 FAX 478-1019

DRAWN BY: DFD **CHECKED BY:** ZW
PROJECT NO.: 1746-02
DATE: DECEMBER 2006
FIGURE NO.: 1