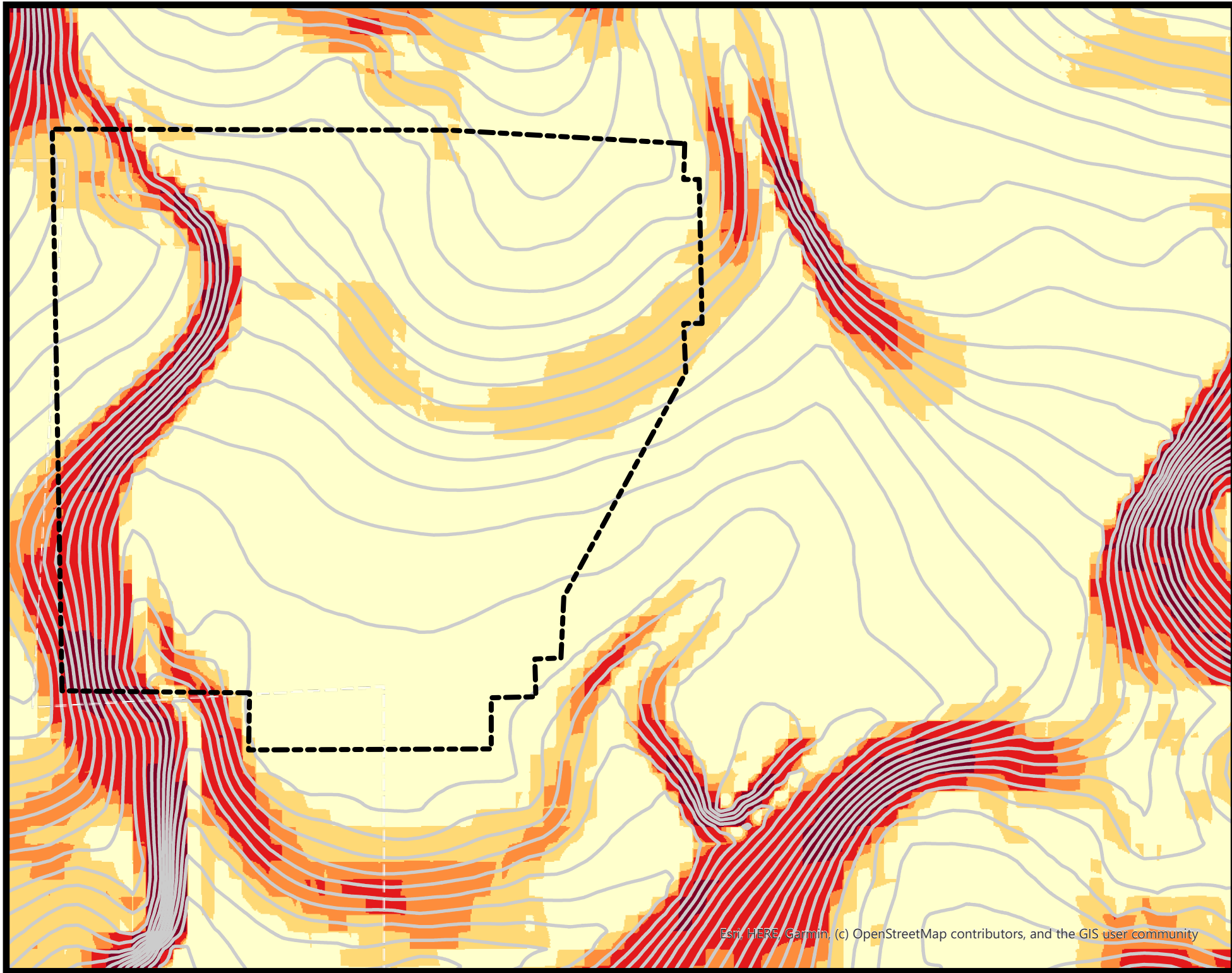


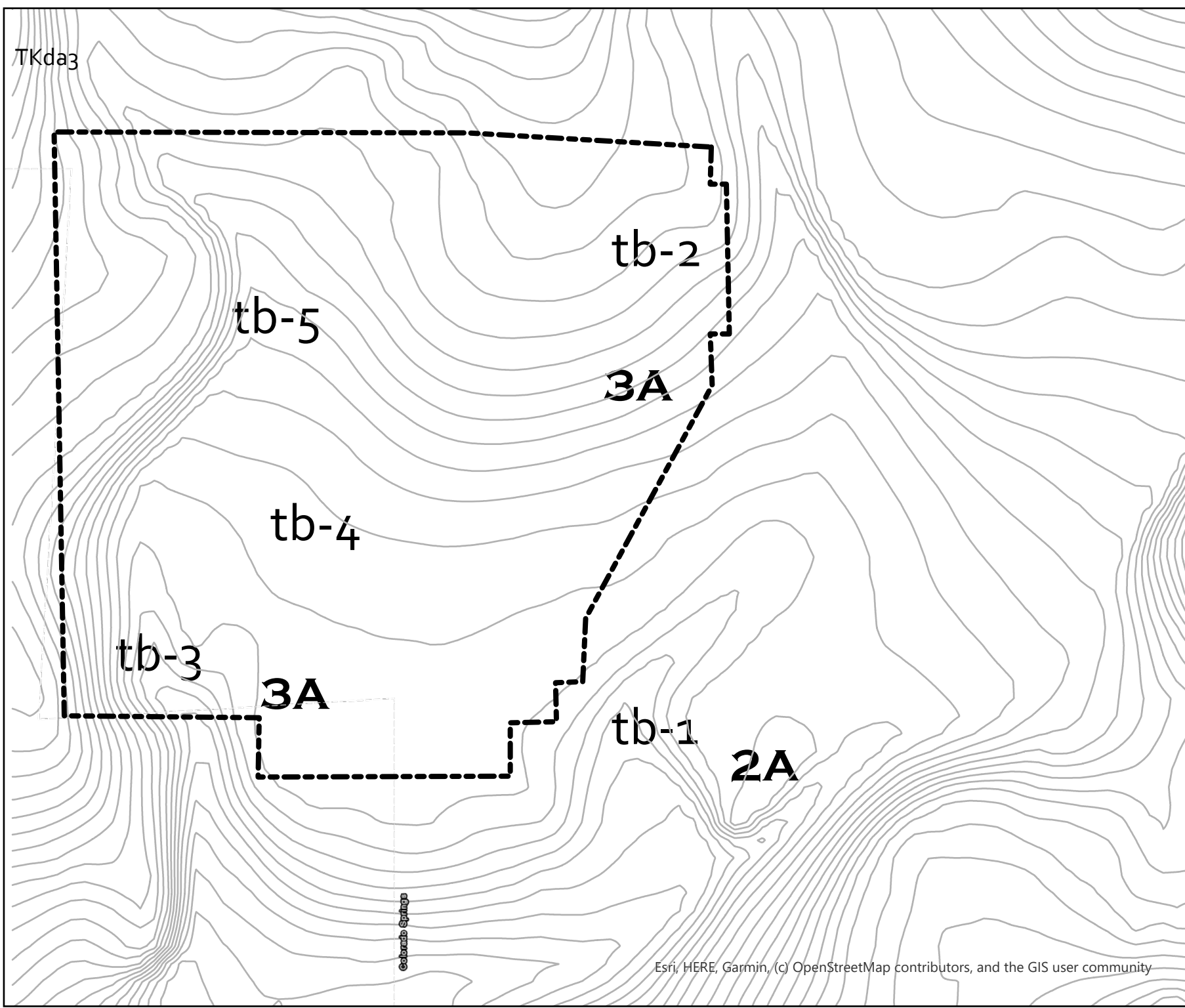
COTTAGES AT WOODMEN HEIGHTS

COLORADO SPRINGS, COLORADO

DEVELOPMENT PLAN - LAND SUITABILITY ANALYSIS



Slope Table		
Minimum Slope	Maximum Slope	Color
0%	8%	
8%	12%	
12%	15%	
15%	25%	
25%	50%	



Legend:

tb-1 LOCATION OF EXPLORATORY BORING

EXISTING TOPOGRAPHY

GEOLOGIC UNITS (MODIFIERS):

Qam Middle alluvium (early Holocene and late Pleistocene)—Cherty pale brown, light yellowish-brown, and grayish-brown poorly sorted sand, silty and clayey sand, and beds of very fine to medium pebble gravel. Unit underlies a terrace that is 10-15 ft higher than stream channel, except along Cottonwood Creek and its tributaries where Qam is as much as 40 ft higher than the channel. A soil profile consisting of an ABAwB/C horizon sequence (Blandford series, Lovers, 1981) is developed in the upper fine feet of Qam. Organic-rich sediment in Qam about 5 ft below the ground surface provided a SLC age of 600 ± 60 y B.P. (15,000-9,000 cal y B.P., Table 1). Unit is corral with at least part of the Broadway Alluvium in the Denver area. Estimated thickness is 10-30 ft.

Qay2 Young alluvium (late and middle Holocene)—Cherty dark gray and grayish brown, thinly bedded to massive (in the sense of appearing to have no internal structure), poorly sorted fine and medium sand, silty sand, and minor pebble gravel. Beds of massive silty sand in which very fine to medium pebbles (about 1-5 in. in maximum dimension) are more or less uniformly dispersed are characteristic of Qay2. Unit underlies low terraces typically 5-6 ft higher Denver area. Except in places along Cottonwood Creek, Qay2 is subject to infrequent large floods. Thickness is 2-10 ft, then channel levels in most main valleys, except that of Cottonwood Creek, where remnants of Qay2 are 2 ft higher than channel level. In the uppermost reaches of most drainage basins, Qay2 also covers the floors.

TKda3 Facies Three (Pebbles) Unit is made up of nearly equal amounts of three lithologies: arkose and arkose conglomerate, micaceous feldspathic sandstone, and sandy chertstone. The arkose rocks are white, tan, and light gray, thick bedded, massive (in the sense of appearing to have no internal structure) or cross stratified, and contain pebbles that are as large as 4-5 in. These strata resemble arkoses in TKda1, but are finer grained, generally thinner, and commonly more quartz rich. Furthermore, pebble compositions may be more varied than in TKda1 and include quartz, white and pink feldspars, white and pink granite, and small amounts of tan vuggy dolomite and red, black, and orange brown chert. A few subrounded to rounded pebbles of altered volcanic rocks also are present. The beds of micaceous feldspathic sandstone are cherty light green to olive gray, fine to medium grained, thin- to thick bedded.

Qao1 Old alluvium (late middle-Pleistocene)—Cherty brown and light yellowish brown, thin bedded, extremely poorly sorted, very fine to medium pebble gravel and pebbly fine to very coarse sand. Locally, the unit also contains large pebbles and small cobbles. Unit underlies terraces that, depending on the drainage basin, are 20-40 ft higher than stream channels. Qao1 may include deposits of more than one age that are undisturbed because they are nearly at the same level in the landscape and relative age dating techniques based on weathering and soil formation are not useful in differentiating them. Unit is oxidized to depths of 6 ft or more, but soil development generally is weaker than in Qam. Soils in Qao1 consist of ABAwC and ABawC horizon sequences. In places, clay lamellae, which are indicative of soil formation, are present in the upper 3-5 ft of the unit. However, in other places, distinct primary stratification is within 2 ft of the ground surface, indicating that the upper part of Qao1 has been reworked or stripped. The upper level of stratification marks the depth to which root ing, burrowing, and B-horizon development have penetrated. Unit may correlate with the Lovers Alluvium in the Denver area. The thin weakly developed weathering profile in this unit is inconsistent with the age indicated by its position in the landscape. Scott and Weber (1971) mapped much of the unit as Piney Creek Alluvium, presumably because of the weak soil development. However, it seems unlikely that ephemeral streams like those in the northern part of the map area would have spread alluvium, typically 2-10 ft thick, over areas as broad as 0.5-0.8 mi during the late Holocene. Piney Creek Alluvium along

ENGINEERING UNITS (MODIFIERS):

2A SAND, SILTY CLAYEY, dark brown to dark grey, very loose, moist to wet

3A SAND, SILTY, with gravel light brown, loose to medium dense, moist to wet

Slope Analysis

Geology, Soil, and Natural Features

Vegetation



Legend:

- Riparian Vegetation
- Native Grass
- Riparian Vegetation Corridor

Composite Analysis



Legend:

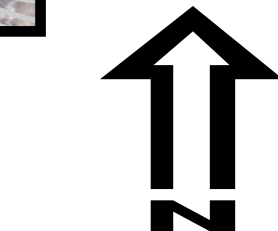
Slope Table		
Minimum Slope	Maximum Slope	Color
15%	25%	
25%	50%	

ENGINEERING UNITS (MODIFIERS):

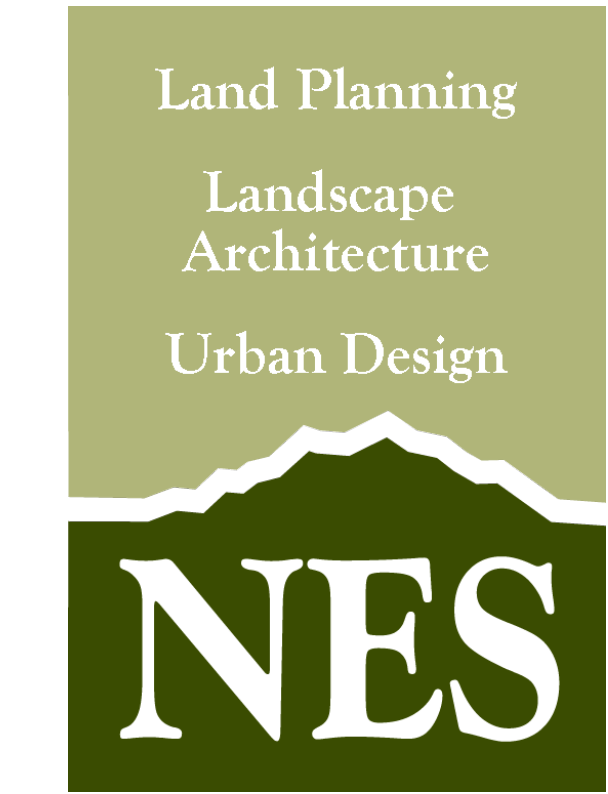
2A SAND, SILTY CLAYEY, dark brown to dark grey, very loose, moist to wet

3A SAND, SILTY, with gravel light brown, loose to medium dense, moist to wet

- Riparian Vegetation
- Native Grass



US Feet
0 100 200 300



N.E.S. Inc.
619 N. Cascade Ave, Suite 200
Colorado Springs, CO 80903

Tel. 719.471.0073
Fax. 719.471.0267

www.nescolorado.com

COTTAGES AT WOODMEN HEIGHTS

DEVELOPMENT PLAN

Date:
Project Manager: KELLY M.
Prepared by: KALEB P.

Land Suitability Analysis

1 OF 1

00-0000-0.00



Planner/ Landscape Architect

In Association With

Project Info

Seal

Sheet Title

Sheet #

File #

Project Area