

Aquatic Resources Delineation Report

Green Business Park Loomis

Loomis, Placer County, California November 2018

Prepared for: Evan Mackenzie Building Engineering & Management, Inc. 4780 Rocklin Road Rocklin, California 95677

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CONTENTS

Aquatic Resources Delineation Report Green Business Park Loomis

	1
1.1 Contact Information	1
2.0 METHODOLOGY	1
3.0 EXISTING CONDITIONS	2
3.1 Hydrology	3
3.2 Soils	3
3.3 Driving Directions	3
4.0 RESULTS	4
4.1 Seasonal Wetland Swale	4
4.2 Perennial Creek (Antelope Creek)	5
4.2 Perennial Creek (Antelope Creek) 4.3 Pond	5 5
4.2 Perennial Creek (Antelope Creek)	5 5 6
4.2 Perennial Creek (Antelope Creek)	5 6 6

Tables

Table 1.	Hydric Rating of Soils within the Study Area	3
Table 2.	Aquatic Resources Delineated within the Study Area	4

Figures

Figure 1. Site and Vicinity

- Figure 2. Natural Resources Conservation Service Soils
- Figure 3. Aquatic Resources

Attachments

- Attachment A. Arid West Wetland Determination Data Forms
- Attachment B. Aquatic Resources Delineation Map
- Attachment C. Plant Species Observed within the Study Area
- Attachment D. Representative Site Photographs
- Attachment E. GIS Shapefiles and the Aquatic Resources Excel Spreadsheet (on CD)

1.0 INTRODUCTION

This report presents the results of a delineation of aquatic resources within the Green Business Park Loomis Project Area (Study Area) conducted by Madrone Ecological Consulting, LLC (Madrone). The approximately 98-acre Study Area is generally located west of the intersection of Taylor Road and Sierra College Boulevard, in southwestern Loomis, Placer County, California. The Study Area is within Sections 8 and 9, Township 11 North, Range 7 East (MDB&M) of the "Rocklin, California" 7.5-Minute Series USGS Topographic Quadrangle (USGS 2015) (**Figure 1**).

1.1 Contact Information

Property Owner	Agent
Mima Capital, LLC.	Ben Watson
4120 Douglas Blvd., #306-175	Madrone Ecological Consulting, LLC
Granite Bay, CA 95746	8421 Auburn Blvd., Suite #248
	Citrus Heights, CA 95610

2.0 METHODOLOGY

Madrone biologists Matt Shaffer and Dustin Brown conducted a delineation of aquatic resources within the Study Area on the 16th through 18th of October and 21st and 28th of November, 2018. Water features and data points were mapped in the field with a GPS unit capable of sub-meter accuracy (Arrow 100). Three-parameter data (vegetation, soils, and hydrology) were collected at each data point, documenting wetland/waters or upland status, as appropriate. The delineation map was prepared in accordance with the *Updated Map and Drawing Standards for the South Pacific Division Regulatory Program* (USACE 2016a). The GPS data was overlaid on an ortho-rectified aerial photograph (NAIP 2016).

The delineation was performed in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008a), *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008b), and the Sacramento District's *Minimum Standards for Acceptance of Preliminary Wetlands Delineations* (USACE 2016b). U.S. Army Corps of Engineers (USACE) regulations (33 CFR 328) were used to determine the presence of Waters of the United States other than wetlands. The most recent *National Wetland Plant List* (Lichvar et al. 2016) was used to determine the wetland indicator status of plants observed in the Study Area. The *Jepson eFlora* (Jepson Flora Project 2018) was used for plant nomenclature, except where it conflicted with the nomenclature in the *National Wetland Plant List*, which was given priority on the data sheets.

We are requesting a Preliminary Jurisdictional Determination for the Study Area.

3.0 EXISTING CONDITIONS

The Study Area is located west of the intersection of Taylor Road and Sierra College Boulevard. The site is bounded to the south by commercial development and to the north by Sierra College Boulevard. The western portion of the Study Area borders Antelope Creek and Delmar Avenue. Bankhead Road and low-density residential housing abut the site to the east. The Study Area is accessible from the northern edge via a fruit stand turnout along Sierra College Boulevard. In addition, the site may be accessed in the southwest corner from a gated entrance off of Delmar Avenue. The Study Area is roughly convex along the west-east vector, and slopes downhill from north to south. The site consists of gently rolling topography with elevations ranging from approximately 300 to 340 feet above mean sea level.

The Study Area primarily consists of multiple fenced pastures along the center, southern, and eastern portions of the site. The pastures were being utilized for grazing by a free-ranging group of cattle during the survey. Several hay trailers are present in one of the pastures, and a few small piles of trash are scattered throughout the area. Vegetation within the pastures is heavily grazed, with several areas supporting moderate to scattered plant cover. Although many plant species were unidentifiable at the time of the survey, generally the pastures support upland annual grassland and ruderal species, including filaree (*Erodium botrys*), yellow star-thistle (*Centaurea solstitialis*), English plantain (*Plantago lanceolata*), rose clover (*Trifolium hirtum*), cut-leaf geranium (*Geranium dissectum*), hairy hawkbit (*Leontodon saxatilis*), prickly lettuce (*Lactuca serriola*), turkey mullein (*Croton setiger*), field bindweed (*Convolvulus arvensis*), soft chess (*Bromus hordeaceus*), Medusa head (*Elymus caput-medusae*), perennial ryegrass (*Festuca perennis*), wild oat (*Avena fatua*), and stinkwort (*Dittrichia graveolens*). Scattered valley oak (*Quercus lobata*), interior live oak (*Quercus wislizeni*), and blue oak (*Quercus douglasii*) are present throughout the pastures, along with several planted exotic species including walnut (*Juglans sp.*), olive (*Olea europaea*), and white poplar (*Populus alba*).

The northeast fenced parcel has not been grazed recently, and features robust vegetation that is dominated by yellow star-thistle, along with some filaree, prickly lettuce, common madia (*Madia elegans*), skeleton weed (*Chondrilla juncea*), and black mustard (*Brassica nigra*). The eastern portion of the parcel is predominantly robust perennial ryegrass. A small fruit stand is located within the parcel, along with an associated strawberry farm and chicken coop. Other nearby areas within the parcel have been historically disked and graded for agriculture, although they are now abandoned.

The western portion of the Study Area features oak savanna on sloped terrain with rock outcroppings transitioning to interior live oak woodland and finally riparian vegetation along Antelope Creek. Several old remnant ditches are located along the slopes, and appear to have been historically used for irrigation or mining purposes. Ground vegetation within the oak savanna is similar to the pasture areas. Vegetation within the oak woodland is robust and consists of several grassland and ruderal species such as soft chess, English plantain, rose clover, hairy hawkbit, prickly lettuce, turkey mullein, perennial ryegrass, ripgut brome (*Bromus diandrus*), hedgehog grass (*Cynosurus echinatus*), California poppy (*Eschscholzia californica*), Italian thistle (*Carduus pycnocephalus*), bull thistle (*Cirsium vulgare*), Fitch's spikeweed (*Centromadia fitchii*), sticky willy (*Galium aparine*), woolly mullein (*Verbascum thapsus*), and moth mullein (*Verbascum blattaria*). Tree and shrub species include predominantly interior live oak, with valley oak, blue oak, green ash (*Fraxinus*)

pennsylvanica), grey pine (*Pinus sabiniana*), tree of heaven (*Ailanthus altissima*), black locust (*Robinia pseudoacacia*), California buckeye (*Aesculus californica*), poison oak (*Toxicodendron diversilobum*), and coyote brush (*Baccharis pilularis*).

An old orchard and remnant homestead are located in the southwest corner of the Study Area. This area is highly disturbed, and features several remnant ditches, cement foundations, soil spoils, and trash. Many exotic trees in this area are associated with the old orchard, including walnut, olive, Mediterranean cypress (*Cupressus sempervirens*), Canary Island date palm (*Phoenix canariensis*), common persimmon (*Diospyros virginiana*), pomegranate (*Punica granatum*), and Callery pear (*Pyrus calleryana*).

3.1 Hydrology

Surface water within the Study Area is driven by rainfall and irrigation runoff; water on the western portion of the site topographically drains into Antelope Creek, while surface water on the eastern portion of the site flows via an existing storm drain system to Sucker Ravine. Sucker Ravine is a tributary to Secret Ravine, which flows into Miners Ravine, then Dry Creek, then Steelhead Creek, then Bannon Slough, and ultimately the Sacramento River. Antelope Creek is a tributary to Dry Creek, which empties into the Sacramento River as previously described. The Study Area is located in the *Dry Creek Watershed*, which is part of the larger *Lower American River Watershed* (HUC 18020111) (USGS 1984).

3.2 Soils

According to the Natural Resources Conservation Service (NRCS) Soil Survey Database (NRCS 2018), two soil mapping units occur within the Study Area (**Figure 2**). One of these soil units (194) consists of hydric components, and the other unit (106) contains hydric inclusions (NRCS 2018). The soils within the Study Area fall within the hydrological soil group B, which generally have a moderate infiltration rate when thoroughly wet and a moderate rate of water transmission. Soils found within the Study Area are summarized in **Table 1**.

Soil Unit Name	Map Unit Symbol	Hydric Rating
Andregg coarse sandy loam, 2 to 9 percent slopes	106	No
Xerofluvents, frequently flooded	194	Yes

Table 1. Hydric Rating of Soils within the Study Area

3.3 Driving Directions

The Study Area is located off of Sierra College Boulevard or Delmar Avenue in Loomis, California, 95650. To access the Study Area from Sacramento, drive east on I-80 towards Loomis. Take exit 109 and turn left onto Sierra College Boulevard. Continue on Sierra College Boulevard for approximately 1.2 miles; the Study Area is located past the intersection of Taylor Road and Sierra College Boulevard on the left. Alternatively, to access the southwest entrance, turn left at the intersection of Taylor Road and Sierra College Boulevard and

drive along Taylor Road (now called Pacific Street) for roughly 0.9 miles. Turn right on Delmar Avenue; the Study Area is located to the right after approximately 0.5 miles.

4.0 RESULTS

A total of approximately 0.86 acre of aquatic resources were delineated within the Study Area, including approximately 0.29 acre of wetlands and 0.57 acre of other waters. A single roadside ditch, six seasonal wetland swale segments, four ponds, and 11 segments of Antelope Creek were delineated within the Study Area. A summary of the aquatic resources found on-site and their acreages is shown in **Table 2**.

Resource Type	Acreage			
Wetlands				
Seasonal Wetland Swale	0.288			
Other Waters				
Antelope Creek	0.156			
Pond	0.404			
Roadside Ditch	0.009			
Total	0.857			

Table 2. Aquatic Resources Delineated within the Study Area

Data sheets are included in **Attachment A**. Maps of the aquatic resources within the Study Area are included as **Figure 3** and **Attachment B**, and a list of the plant species observed in the Study Area with their wetland indicator status is included in **Attachment C**. Representative site photographs are included in **Attachment D**. GIS Shapefiles and the *Aquatic Resources Excel Spreadsheets* for the aquatic resources shown on **Figure 3** and **Attachment B** are included on a CD in **Attachment E**. Each of the feature types are described below.

4.1 Seasonal Wetland Swale

Seasonal wetland swales are sloping, linear seasonal wetlands that convey storm water runoff, and may detain it for short periods of time. Six seasonal wetland swale segments are located in pastures within the central and southeast portion of the Study Area. SWS-1 drains into a small pond in the center of the site (P-2), while two swale segments (SWS-2, SWS-3) drain via culvert from P-2 into a large pond (P-3) in the southeast corner of the Study Area. Another swale (SWS-5, SWS-6) also flows into P-3 via a system of culverts. P-3 is drained via culvert by SWS-4, which flows off-site at the southern end of the Study Area. Approximately 0.288 acre of seasonal wetland swales are located on-site. At the time of the survey, vegetation within the swales on-site include curly dock (*Rumex crispus*), Carter's buttercup (*Ranunculus bonariensis*), rabbitsfoot grass (*Polypogon monspeliensis*), pennyroyal (*Mentha pulegium*), common purslane (*Portulaca oleracea*), hyssop loosestrife (*Lythrum hyssopifolia*), tall flatsedge (*Cyperus eragrostis*), swamp grass (*Crypsis schoenoides*), Bermuda grass (*Cynodon dactylon*), and prostrate knotweed (*Polygonum aviculare*). Hydrology within the swales is driven predominantly by storm water runoff within the pasture areas, along with draining water from ponds P-2 and P-3. The swales generally flow south, and eventually

all drain into an off-site culvert which flows into Sucker Ravine. As previously described, Sucker Ravine is a tributary to the navigable Sacramento River; thus, the swales on-site are likely to be jurisdictional waters of the U.S. Data Points DP-3 and DP-7 were collected within seasonal wetland swales and contained hydrophytic vegetation, soils, and wetland hydrology. The swales were mapped at the Ordinary High Water Mark (OHWM), which was identified based on drift deposits, water marks, topographic breaks, and aerial imagery.

4.2 Perennial Creek (Antelope Creek)

Antelope Creek (Creek-1 through Creek-11), a perennial creek, travels from north to south along the western margin of the Study Area. Flows within the creek are perennial in nature, with steady-flowing water observed during the site visits. The creek passes in and out of the Study Area, and 11 segments (0.156 acre) fall within the site boundary. Vegetation within and along the banks of the creek is robust and includes tall flatsedge, curly dock, floating primrose willow (Ludwigia peploides), panicled willowherb (Epilobium brachycarpum), fringed willowherb (Epilobium ciliatum), common knotweed (Persicaria lapathifolia), common plantain (Plantago major), Johnsongrass (Sorghum halepense), cattail (Typha sp.), and rough cocklebur (Xanthium strumarium). Vegetation within the riparian corridor along Antelope Creek consists almost exclusively of Himalayan blackberry (Rubus armeniacus) thickets, with some pokeweed (Phytolacca americana). Tree cover includes valley oak, Oregon ash (Fraxinus latifolia), western sycamore (Platanus racemosa), Fremont cottonwood (Populus fremontii), sandbar willow (Salix exigua), Goodding's black willow (Salix gooddingii), and arroyo willow (Salix lasiolepis). In addition, black elderberry (Sambucus nigra), the host plant for the federally threatened valley elderberry longhorn beetle, was found within the riparian corridor. The creek is directly connected to the navigable Sacramento River, as previously described, and is therefore likely to be a jurisdictional water of the U.S. Data point DP-9 was collected within the creek; it contained hydrophytic vegetation, wetland hydrology, and was inundated with water. The creek was mapped at the OHWM, which was identified based on sediment deposits, drift deposits, water marks, vegetation, topographic breaks, and aerial imagery.

4.3 Pond

Four man-made ponds reside within the Study Area (0.404 acre); three ponds (P-1, P-2, P-3) are located in the central and southeast portion of the site, and one pond (P-4) is located in the northwest corner. As previously described, P-2 and P-3 are connected via a seasonal wetland swale system. P-1 and P-2 appear to have been created as stock ponds and exhibit evidence of cattle use, such as extensive hoof prints in the muddy margins of the ponds. At the time of the survey P-1 was dry and P-2 was almost empty (although the pond features a small berm along the southern edge to help store water). P-3 also has a low water level; it appears to have been created to store water for irrigation purposes, and has much steeper, less mucky margins than P-1 and P-2. All three ponds are mostly unvegetated with scattered species occurring along the margins, such as common purslane, prostrate knotweed, and Bermuda grass. P-4 was constructed at some point after 1966 (Historic Aerials), and is much older than the other ponds on site. It features steep stone walls, and appears to have been created from a historic swale. The pond is no longer in active use, and was dry during the October survey. A man-made spillway on the west side of the pond may drain overflow water into Antelope Creek. Vegetation is abundant within and along the margins of

the pond, and includes bull thistle, tall flatsedge, Oregon ash, prostrate knotweed, Himalayan blackberry, curly dock, sandbar willow, rough cocklebur, and manyflower tobacco (*Nicotiana acuminata*). P-2 and P-3 are connected to Sucker Ravine, and P-4 appears to drain into Antelope Creek. As previously described, both Sucker Ravine and Antelope Creek are tributaries to the navigable Sacramento River, and thus these ponds are likely to be jurisdictional waters of the U.S. It is uncertain whether or not P-1 drains or otherwise connects with other waters; the jurisdictional status of this pond is unclear. Data point DP-5 was collected within P-2, and contained hydrophytic vegetation, soils, and wetland hydrology. The ponds were mapped at the OHWM, which was identified based on water marks, vegetation, topographic breaks, and aerial imagery.

4.4 Roadside Ditch

A single roadside drainage ditch (RD-1, 0.009 acre) is located within the Study Area, along Bankhead Road. The ditch features scattered vegetative ground cover that primarily includes Himalayan blackberry, perennial ryegrass, curly dock, and tall flatsedge. The base of the ditch is mostly unvegetated, and much of the area is covered in leaf litter. Many trees are growing within and along the ditch, including valley oak, interior live oak, grey pine, and Fremont cottonwood. Storm water runoff flows south from a culvert at the northern end of the ditch, and eventually drains off-site onto a single-family home and property. It is uncertain whether or not the ditch drains into other waters; thus, the jurisdictional status of the feature is unknown. The ditch was mapped at the OHWM based on vegetation, water marks, and topographic breaks.

5.0 CONCLUSION

The 0.857 acre of aquatic resources mapped on the site may be jurisdictional, and the applicant is requesting a Preliminary Jurisdictional Determination for the Aquatic Resources Delineation Map of the Study Area (**Attachment B**).

6.0 **REFERENCES**

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- U.S. Department of the Interior, Geological Survey (USGS). 1984. *Hydrologic Unit Map, State of California*. Geological Survey. Reston, Virginia.
- U.S. Department of the Interior, Geological Survey (USGS). 2015. *Rocklin, California* 7.5-minute Quadrangle. Geological Survey. Denver, Colorado.

Figures

Figure 1. Vicinity Map

- Figure 2. Natural Resources Conservation Service Soils
- Figure 3. Aquatic Resources



Source: United States Geologic Survey, 2015. Sections 8 and 9, Township 11 North, Range 7 East, MDB&M "Rocklin" California 7.5-Minute Topographic Quadrangle Longitude -121.21462, Latitude 38.85606

Site and Vicinity



Green Business Park Loomis Loomis, Placer County, California



Soil Survey Source: USDA, Soil Conservation Service. Soil Survey Geographic (SSURGO) database for Placer County, California, Western Part Aerial Source: USDA, National Agriculture Imagery Program, 30 June 2016.





Figure 3 Aquatic Resources



Green Business Park Loomis Loomis, Placer County, California

200

400

Attachments

- Attachment A. Arid West Wetland Determination Data Forms
- Attachment B. Aquatic Resources Delination Map
- Attachment C. Plant Species Observed within the Study Area
- Attachment D. Representative Site Photographs
- Attachment E. GIS Shapefiles and the Aquatic Resources Excel Spreadsheet (on CD)

Arid West Wetland Determination Data Forms

Project/Site:	Green Business Park Loomis 0			City/County: L	City/County: Loomis, Placer Count			Sampling Date:		10/17/18	
Applicant/Owner:	Mima Capi	ital, LLC.						State: CA	Sampling Point:	DP1	
Investigator(s):	Matt Shaff	er			Section,	Township,	Range:	State: S8, T11N, F	R7E		
Landform (hillslop	e, terrace, e	etc.): <u>t</u>	errace		Local relie	ef (concave	, conve	k, none): <u>concave</u>	Slop	be (%): <u><</u>	2
Subregion (LRR):	Mediterran	ean Califor	nia (LRR C)	Lat:		38.81	616714	Long:	-121.2145192	Datum: <u>N</u>	AD 83
Soil Map Unit Nam	ne: <u>(</u> 10	6) Andregg	coarse sandy lo	am, 2-9% :	slopes			NWI Classification:	None		
Are climatic / hydr	ologic cond	litions on the	e site typical for t	his time of	year?	Yes	Х	No	(If no, explain in Re	emarks.)	
Are Vegetation	, So	oil,	or Hydrology		significantly di	isturbed?	Are "I	Normal Circumstanc	es" present? Yes	<u> </u>	o
Are Vegetation	, So	oil,	or Hydrology		naturally prob	lematic?	(If nee	eded, explain any an	swers in Remarks.)		

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	NoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNoNONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONONO_NO	X X X	Is the Sampled Area within a Wetland?	Yes	No <u>X</u>	
Remarks: Slight depression in lands	cape. Rude	ral grazing	pasture a	nd/or old agricultural field.			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:) 1.) 2.	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A) Total Number of Dominant
3				Species Across All Strata: 0 (B)
4	0	=Total Cover		Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)
Sapling/Shrub Stratum (Plot size:)				Prevalence Index Worksheet:
1				Total % Cover of: Multiply by:
2		. <u> </u>		OBL species x1 = 0
3				FACW species x2 =0
4				FAC species 0 x3 = 0
5				FACU species <u>0</u> x4 = <u>0</u>
	0	=Total Cover		UPL species <u>31</u> x5 = <u>155</u>
<u>Herb Stratum</u> (Plot size: <u>1 meter²</u>)				Column Totals: <u>31</u> (A) <u>155</u> (B)
1. Centaurea solstitialis	15		UPL	Prevalence Index = B/A = 5.0
2. <u>Madia elegans</u>	16		UPL	
3. <u>Unknown seedling</u>	17		N/A	Hydrophytic Vegetation Indicators:
4. Unknown seedling	17		N/A	Dominance Test is >50%
5				Prevalence Index is $\leq 3.0^1$
6				Morphological Adaptationd ¹ (Provide supporting data in Remarks or on a separate sheet)
8.				Problematic Hydrophytic Vegetation ¹ (Explain)
	65	=Total Cover		
Woody Vine Stratum (Plot size:) 1				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2	0	=Total Cover		Hydrophytic Vegetation
% Bare Ground in Herb Stratum45	% Cover of	Biotic Crust	0	Present? Yes NoX

Remarks: Portion of cover consists of unknown seedlings that cannot be identified this time of the year. Hydrophytic vegetation indicator determined based on known associated vegetation, soil, and hydrology.

SOIL

epth	Matrix			Redox Feat	ures						
nches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Rema	irks		
-2	7.5YR 3/2	100					sand				
2-8	7.5YR 4/4	80	7.5YR 4/3	20	С	Μ	sand				
							·				
				_							
vpe: C=0	Concentration. D=Depletio	n. RM=R	educed Matrix. CS	=Covered or	Coated Sa	nd Grains.	² Location: PL=Pore Lining	ı. M=Matrix.			
vdric Sc	bil Indicators: (Applica	able to a	II I RRs. unless	otherwise	noted.)	-	Indicators for Probler	natic Hydric Soils	3.		
Histo	osol (A1)		Sand	v Redox (S	5)		1 cm Muck (A9) (I				
 Histi	c Epipedon (A2)		Stripped Matrix (S6)				2 cm Muck (A10) (LRR B)				
 Blac	k Histic (A3)		Loam	v Muckv M	ineral (F1)		Reduced Vertic (F18)				
 Hvdr	ogen Sulfide (A4)		Loam	v Gleved N	(F2)		Red Parent Material (TF2)				
 Strat	tified Lavers (A5) (LRR	C)	Deple	eted Matrix	(F3)		Other (Explain in Remarks)				
- 1 cm	Muck (A9) (LRR D)	,	Redo	x Dark Sur	face (F6)			,			
- Depl	eted Below Dark Surfac	e (A11)	Deple	eted Dark S	urface (F7	7)					
	k Dark Surface (A12)		Redo	x Depressi	ons (F8)	,	3				
 Sano	dv Mucky Mineral (S1)		Verna	al Pools (F9)		"Indicators of	hydrophytic veget	ation and		
San	dv Gleved Matrix (S4)				,		unless di	sturbed or problen	natic.		
estrictiv	ve Laver (if present):							p			
	edrock										
vne be	Sareen		8			н	dric Soil Present?	Yes	No		
ype: <u>be</u>	ches):										

HIDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1) Salt Crust (B11)	Water Marks (B1) (Riverine)
High Water Table (A2) Biotic Crust (B12)	Sediment Deposits (B2) (Riverine)
Saturation (A3) Aquatic Invertebrates (B1	3) Drift Deposits (B3) (Riverine)
Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C	C1) Drainage Patterns (B10)
Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres a	ong Living Roots (C3) Dry-Season Water Table (C2)
Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron	n (C4) Crayfish Burrows (C8)
Surface Soil Cracks (B6) Recent Iron Reduction in	Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9) Other (Explain in Remark	s) FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No X Depth (inches):	
Water Table Present? Yes <u>No X</u> Depth (inches):	
Saturation Present? Yes No X Depth (inches):	Wetland Hydrology Present? Yes No X
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous	inspections), if available:
Remarks: No hydrology present	
Tremarks. No hydrology present	

Project/Site:	Green Business Park Loomis			ity/County: Loomis, Placer County			Sampling Date:	10/17/18
Applicant/Owner:	Mima Capita	il, LLC.				State: CA	Sampling Point:	DP2
Investigator(s):	Matt Shaffer		Secti	on, Township,	Range:	State: S8, T11N, F	R7E	
Landform (hillslop	e, terrace, et	c.): <u>terrace</u>	Local	relief (concave	, convex	(, none): <u>concave</u>	Slo	pe (%): <u><2</u>
Subregion (LRR):	Mediterrane	an California (LRR C)	Lat:	38.81	438352	Long:	-121.2142759	Datum: NAD 83
Soil Map Unit Nan	ne: <u>(106</u>)) Andregg coarse sandy loam, 2	2-9% slopes			NWI Classification:	None	
Are climatic / hydr	ologic conditi	ons on the site typical for this t	ime of year?	Yes	Х	No	(If no, explain in R	emarks.)
Are Vegetation	, Soil	, or Hydrology	significant	ly disturbed?	Are "I	Normal Circumstand	es" present? Yes	3 <u>X</u> No
Are Vegetation	, Soil	, or Hydrology	naturally p	oroblematic?	(If nee	eded, explain any an	swers in Remarks.))

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	X X X	Is the Sampled Area within a Wetland?	Yes	No <u>X</u>	
Remarks: Erodium dominated depre	ession withir	ı ruderal pa	sture.				

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species
1.				That Are OBL, FACW, or FAC: 0 (A)
2.				Total Number of Dominant
3.				Species Across All Strata: 1 (B)
4				Percent of Dominant Species
	0	=Total Cover		That Are OBL, FACW, or FAC:0% (A/B)
Sapling/Shrub Stratum (Plot size:				Prevalence Index Worksheet
1.				Total % Cover of: Multiply by:
2.				OBL species 0 x1 = 0
3.		·		FACW species 0 x2 = 0
4.		·		FAC species 0 x3 = 0
5.				FACU species 43 x4 = 172
	0	=Total Cover		UPL species 2 x5 = 10
<u>Herb Stratum</u> (Plot size: <u>1 meter²</u>)		-		Column Totals: 45 (A) 182 (B)
1. Erodium botrys	40	Y	FACU	Prevalence Index = B/A = 4.0
2. Centromadia fitchii	1		FACU	
3. Bromus hordeacous	2		UPL	Hydrophytic Vegetation Indicators:
4. Festuca perennis	Т		FAC	Dominance Test is >50%
5. Trifolium hirtum	Т		UPL	Prevalence Index is ≤3.0 ¹
6. Cynodon dactylon	2	. <u> </u>	FACU	Morphological Adaptationd ¹ (Provide supporting
7				data in Remarks or on a separate sheet)
8		. <u> </u>		Problematic Hydrophytic Vegetation ¹ (Explain)
	45	=Total Cover		
Woody Vine Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1				be present, unless disturbed or problematic.
2				Hydrophytic
	0	=Total Cover		Vegetation
% Bare Ground in Herb Stratum 55	% Cover of	Biotic Crust	0	Present? Yes No X
Remarks:				·

SOIL

	Matrix		R	edox Feat	ures						
inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Rema	irks		
)-3	10YR 3/3	100					loamy sand				
	<u> </u>										
	·										
				<u> </u>	<u> </u>		2				
Type: C=C	concentration, D=Depletio	n, RM=Re	duced Matrix, CS=	Covered or	Coated Sar	d Grains.	Location: PL=Pore Lining	, M=Matrix.			
lydric So	il Indicators: (Applica	able to al	I LRRs, unless	otherwise	noted.)		Indicators for Problem	natic Hydric Soils	3 ³ :		
Histo	sol (A1)		Sandy	Redox (S	5)		1 cm Muck (A9) (I	RR C)			
Histic	: Epipedon (A2)		Stripp	ed Matrix ((S6)		2 cm Muck (A10) (LRR B)				
	Black Histic (A3) Loamy Mucky Mineral (F1)						Reduced Vertic (F18)				
Black	- Hydrogen Sulfide (A4) Loamy Gleved Matrix (F2)							- /			
Black	ogen Sulfide (A4)		Loam	/ Gleyed N	latrix (F2)		Red Parent Mater	ial (TF2)			
Black Hydr Strat	ogen Sulfide (A4) fied Layers (A5) (LRR (C)	Loam Deple	/ Gleyed M ted Matrix	1atrix (F2) (F3)		Red Parent Mater Other (Explain in F	ial (TF2) Remarks)			
Black Hydr Strat 1 cm	ogen Sulfide (A4) fied Layers (A5) (LRR (Muck (A9) (LRR D)	C)	Loam Deple Redox	/ Gleyed M ted Matrix Dark Surf	face (F6)		Red Parent Mater Other (Explain in F	ial (TF2) Remarks)			
Black Hydro Strat 1 cm Deple	pgen Sulfide (A4) fied Layers (A5) (LRR (Muck (A9) (LRR D) eted Below Dark Surfac	C) ce (A11)	Loam Deple Redoy	/ Gleyed M ted Matrix Dark Surf	Matrix (F2) (F3) face (F6) surface (F7)		Red Parent Mater Other (Explain in F	ial (TF2) Remarks)			
Black Hydro Strat 1 cm Deplo Thick	ogen Sulfide (A4) fied Layers (A5) (LRR Muck (A9) (LRR D) eted Below Dark Surfac Dark Surface (A12)	C) ce (A11)	Loam Deple Redoy Deple Redoy	/ Gleyed M ted Matrix to Dark Surf ted Dark S to Depressio	Matrix (F2) (F3) face (F6) surface (F7) ons (F8)		Red Parent Mater Other (Explain in F	ial (TF2) Remarks) hvdrophytic veget	ation and		
Black Hydr Strat 1 cm Deple Thick Sanc	ogen Sulfide (A4) fied Layers (A5) (LRR 0 Muck (A9) (LRR D) eted Below Dark Surfac : Dark Surface (A12) y Mucky Mineral (S1)	C) ce (A11)	Loam Deple Redoy Deple Redoy Verna	/ Gleyed M ted Matrix Dark Surf ted Dark S Depression Pools (F9	Matrix (F2) (F3) face (F6) surface (F7) ons (F8)		Red Parent Mater Other (Explain in F	ial (TF2) Remarks) hydrophytic veget drology must be pi	ation and resent,		
Black Hydr Strat T cm Deple Thick Sanc Sanc	pgen Sulfide (A4) fied Layers (A5) (LRR 0) eted Below Dark Surfac Dark Surface (A12) y Mucky Mineral (S1) y Gleyed Matrix (S4)	C) œ (A11)	Loam Deple Redoy Redoy Redoy Verna	/ Gleyed M ted Matrix Cark Surf ted Dark S Depression Pools (FS	Matrix (F2) (F3) face (F6) furface (F7) fons (F8)		Red Parent Mater Other (Explain in F ³ Indicators of wetland hys unless dis	hydrophytic veget drology must be pi sturbed or problem	ation and resent, natic.		
Black Hydri Strat Composition Hydri Strat Deple Thick Sand Sand Restrictiv	pgen Sulfide (A4) fied Layers (A5) (LRR 0) eted Below Dark Surfac Dark Surface (A12) y Mucky Mineral (S1) y Gleyed Matrix (S4) e Layer (if present):	C) ce (A11)	Loam Deple Redoy Deple Redoy Verna	/ Gleyed M ted Matrix Dark Surf ted Dark S Depression Pools (FS	Matrix (F2) (F3) face (F6) furface (F7) ons (F8) 9)		Red Parent Mater Other (Explain in F ³ Indicators of wetland hy unless dis	ial (TF2) Remarks) hydrophytic veget drology must be pr sturbed or problem	ation and resent, natic.		
Black Hydri Strat Composition Hydri Strat Deple Thick Sanc Sanc Restrictiv Type: be	pgen Sulfide (A4) fied Layers (A5) (LRR D) Muck (A9) (LRR D) eted Below Dark Surfac Dark Surface (A12) y Mucky Mineral (S1) y Gleyed Matrix (S4) e Layer (if present): Pdrock	C) ce (A11)	Loam Deple Redoy Deple Redoy Verna	/ Gleyed M ted Matrix : Dark Surf : Dark S : Depression I Pools (FS	Matrix (F2) (F3) face (F6) surface (F7) ons (F8)		Red Parent Mater Other (Explain in F ³ Indicators of wetland hyd unless dis	ial (TF2) Remarks) hydrophytic veget drology must be pi sturbed or problen	ation and resent, natic.		
Black Hydr Strat 1 cm Deple Thick Sanc Sanc	pgen Sulfide (A4) fied Layers (A5) (LRR 0 Muck (A9) (LRR D) eted Below Dark Surfac Dark Surface (A12) y Mucky Mineral (S1) y Gleved Matrix (S4)	C) ce (A11)	Loam Deple Redoy Deple Redoy Verna	/ Gleyed M ted Matrix : Dark Surf ted Dark S : Depression I Pools (FS	Matrix (F2) (F3) face (F6) surface (F7) ons (F8) 9)		Red Parent Mater Other (Explain in F ³ Indicators of wetland hyu	ial (TF2) Remarks) hydrophytic veget drology must be pi sturbed or problem	ation and resent, natic.		

HYDROLOGY						
Wetland Hydrology Indicators:						
Primary Indicators (minimum of one required; check	call that apply)	Secondary Indicators (2 or more required)				
Surface Water (A1)	Salt Crust (B11)	Water Marks (B1) (Riverine)				
High Water Table (A2)	Biotic Crust (B12)	Sediment Deposits (B2) (Riverine)				
Saturation (A3)	Aquatic Invertebrates (B13)	Drift Deposits (B3) (Riverine)				
Water Marks (B1) (Nonriverine)	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)				
Sediment Deposits (B2) (Nonriverine)	Oxidized Rhizospheres along Living Roo	ots (C3) Dry-Season Water Table (C2)				
Drift Deposits (B3) (Nonriverine)	Presence of Reduced Iron (C4)	Crayfish Burrows (C8)				
Surface Soil Cracks (B6)	Recent Iron Reduction in Tilled Soils (C6	 Saturation Visible on Aerial Imagery (C9) 				
Inundation Visible on Aerial Imagery (B7)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Water-Stained Leaves (B9)	Other (Explain in Remarks)	FAC-Neutral Test (D5)				
Field Observations:						
Surface Water Present? Yes No _X	Depth (inches):					
Water Table Present? Yes No _X	Depth (inches):					
Saturation Present? Yes <u>No X</u>	Depth (inches): We	etland Hydrology Present? Yes <u>No X</u>				
(includes capillary fringe)	<u> </u>					
Describe Recorded Data (stream gauge, monitoring w	vell, aerial photos, previous inspections), if	available:				
Pomorko: No hydrology prosont						
Remarks. No hydrology present						

Project/Site:	Green Business Park Loomis			City/County: L	_oomis, Pla	cer Cou	inty	Sampling Da	ate:	10/17/18
Applicant/Owner:	Mima Capita	I, LLC.					State: CA	Sampling Po	oint: DP3	
Investigator(s):	Matt Shaffer			Section,	Township,	Range:	State: S8, T11N, F	R7E		
Landform (hillslop	e, terrace, etc	c.): hillslope		Local relie	ef (concave	, conve	k, none): <u>concave</u>		Slope (%):	5
Subregion (LRR):	Mediterranea	an California (LRR C)	Lat:		38.81	313587	Long:	-121.2141527	Datum:	NAD 83
Soil Map Unit Nan	ne: <u>(106)</u>	Andregg coarse sandy loa	am, 2-9% s	lopes			NWI Classification:	None		
Are climatic / hydr	ologic conditi	ons on the site typical for t	nis time of	year?	Yes	Х	No	_(If no, explain i	n Remarks.)	1
Are Vegetation	, Soil	, or Hydrology		significantly d	isturbed?	Are "	Normal Circumstand	es" present?	Yes X	No
Are Vegetation	, Soil	, or Hydrology		naturally prob	lematic?	(If nee	eded, explain any an	swers in Remar	ks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	X X X	No No	Is the Sampled Area within a Wetland?	Yes _	x	No	
Remarks: Shallow swale that drains	into pond	I. With	in pasture	and heavily grazed/trampled by cattle.				

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species
2.	. <u> </u>			Total Number of Dominant
š		·		Species Across All Strata:(B)
i	0	=Total Cover		Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
Sapling/Shrub Stratum (Plot size:)				Prevalence Index Worksheet:
				Total % Cover of: Multiply by:
		<u> </u>		OBL speciesx1 =
				FACW speciesx2 =
·		<u> </u>		FAC speciesx3 =
		<u> </u>		FACU speciesx4 =
	0	=Total Cover		UPL speciesx5 =
<u>Herb Stratum</u> (Plot size: <u>1 meter²</u>)				Column Totals:(A)(B)
. Unknown seedling	30	Y	N/A	Prevalence Index = B/A =
. Unknown seedling	20	Y	N/A	
. Unknown seedling	10		N/A	Hydrophytic Vegetation Indicators:
. Polypogon monspeliensis	Т		FACW	Dominance Test is >50%
. Ranunculus bonariensis	Т		OBL	Prevalence Index is ≤3.0 ¹
		·		Morphological Adaptationd ¹ (Provide supporting data in Remarks or on a separate sheet)
i				Problematic Hydrophytic Vegetation ¹ (Explain)
	60	=Total Cover		
Woody Vine Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<u>}</u>		<u> </u>		Hydrophytic
	0	=Total Cover		Vegetation
% Bare Ground in Herb Stratum 40	% Cover of	Biotic Crust	0	Present? Yes X No

US Army Corps of Engineers

SOIL

Depth	Matrix			Red	dox Featı	ures			
inches)	Color (moist)	%	Color	(moist)	%	Type ¹	Loc ²	Texture	Remarks
0-3	7.5YR 3/2	95	7.5YR 3	3/4	5	С	PL, M	loam	
3-7	10YR 3/2	98	7.5 YR	3/4	2	С	М	sandy loam	
7-10	7.5YR 3/2	95	7.5YR 3	3/4	5	С	М	sandy loam	
						Castad Ca		² l anations, DL – Dana Lin	ing M-Matrix
ype: C=C	Joncentration, D=Depletic	DN, RIVIER	educed Ma	ainx, CS=Co	overed or	Coaled Sa	nd Grains.	Location: PL=Pore Lin	ling, M=Matrix.
lydric So	il Indicators: (Application)	able to a	all LRRs,	unless otl	herwise	noted.)		Indicators for Prob	lematic Hydric Soils ³ :
Histo	sol (A1)			Sandy R	Podov (SP	5)		1 M	
				- Oundy I)			
Histo	c Epipedon (A2)			Stripped	d Matrix (S6)		2 cm Muck (A9	0) (LRR B)
Histo Histic	c Epipedon (A2) < Histic (A3)			Stripped Loamy N	d Matrix (S Mucky Mi	S6) neral (F1)		2 cm Muck (A9	0) (LRR B) c (F18)
Histic Histic Black Hydro	c Epipedon (A2) < Histic (A3) ogen Sulfide (A4)			Stripped Loamy N Loamy N	d Matrix (S Mucky Mi Gleyed M	5) S6) neral (F1) atrix (F2)		2 cm Muck (A9 2 cm Muck (A1 Reduced Vertic Red Parent Ma) (LRR B) ≎ (F18) terial (TF2)
Histic Histic Black Hydro Strati	c Epipedon (A2) (Histic (A3) ogen Sulfide (A4) ified Layers (A5) (LRR	C)		Stripped Loamy M Loamy O Depleted	d Matrix (S Mucky Mi Gleyed M d Matrix (S) S6) neral (F1) atrix (F2) (F3)		2 cm Muck (A9 2 cm Muck (A1 Reduced Vertic Red Parent Ma Other (Explain	0) (LRR B) (F18) terial (TF2) in Remarks)
Histic Histic Black Hydro Strati	c Epipedon (A2) < Histic (A3) ogen Sulfide (A4) ified Layers (A5) (LRR Muck (A9) (LRR D)	C)		Stripped Loamy N Loamy O Depleted Redox D	d Matrix (S Mucky Mi Gleyed M d Matrix (Dark Surfa	S) S6) neral (F1) atrix (F2) (F3) ace (F6)		2 cm Muck (A9 2 cm Muck (A1 Reduced Vertic Red Parent Ma Other (Explain	0) (LRR B) (F18) terial (TF2) in Remarks)
Histo Histic Black Hydro Strati	c Epipedon (A2) < Histic (A3) ogen Sulfide (A4) ified Layers (A5) (LRR Muck (A9) (LRR D) eted Below Dark Surfac	C) ce (A11)	 	Stripped Loamy N Loamy O Depleted Redox D Depleted	d Matrix (Mucky Mi Gleyed M d Matrix (Dark Surfa d Dark Su	5) S6) latrix (F2) (F3) ace (F6) urface (F7	·)	2 cm Muck (A9 2 cm Muck (A1 Reduced Vertic Red Parent Ma Other (Explain	0) (LRR B) c (F18) terial (TF2) in Remarks)
Histo Histic Black Hydru Strati 1 cm Deple Thick	c Epipedon (A2) k Histic (A3) ogen Sulfide (A4) ified Layers (A5) (LRR Muck (A9) (LRR D) eted Below Dark Surface k Dark Surface (A12)	C) ce (A11)	 	Stripped Loamy N Loamy O Depleted Redox D Depleted Redox D	d Matrix (S Mucky Mi Gleyed M d Matrix (Dark Surfa d Dark Su	5) neral (F1) latrix (F2) (F3) ace (F6) urface (F7 ons (F8)) ()	2 cm Muck (A9 2 cm Muck (A1 Reduced Vertic Red Parent Ma Other (Explain	0) (LRR B) (F18) terial (TF2) in Remarks)
Histo Histo Black Hydro Strati Deplo Thick Sand	c Epipedon (A2) k Histic (A3) ogen Sulfide (A4) ified Layers (A5) (LRR Muck (A9) (LRR D) eted Below Dark Surface k Dark Surface (A12) by Mucky Mineral (S1)	C) ce (A11)	 	Stripped Loamy M Loamy O Depleted Redox D Depleted Redox D Vernal F	d Matrix (Mucky Mi Gleyed M d Matrix (Dark Surfa d Dark Su Depressic Pools (F9	5) neral (F1) latrix (F2) (F3) ace (F6) urface (F7 ons (F8)))	2 cm Muck (A9 2 cm Muck (A1 Reduced Vertic Red Parent Ma Other (Explain ³ Indicators wetland	of hydrophytic vegetation and
Histo Histo Black Hydro Strati Deple Thick Sand Sand	c Epipedon (A2) Histic (A3) ogen Sulfide (A4) ified Layers (A5) (LRR Muck (A9) (LRR D) eted Below Dark Surface C Dark Surface (A12) ly Mucky Mineral (S1) ly Gleyed Matrix (S4)	C) ce (A11)	 	Stripped Loamy M Loamy O Depleted Redox D Depleted Redox D Vernal F	d Matrix (S Mucky Mi Gleyed M d Matrix (Dark Surfa d Dark Su Depressio Pools (F9	S) neral (F1) atrix (F2) (F3) ace (F6) urface (F7 ons (F8))	()	2 cm Muck (A9 2 cm Muck (A1 Reduced Vertic Red Parent Ma Other (Explain ³ Indicators wetland unless	of hydrophytic vegetation and hydrology must be present, disturbed or problematic.
Histo Histo Black Hydro Strati 1 cm Deplo Thick Sand Sand	c Epipedon (A2) k Histic (A3) ogen Sulfide (A4) ified Layers (A5) (LRR Muck (A9) (LRR D) eted Below Dark Surface k Dark Surface (A12) y Mucky Mineral (S1) y Gleyed Matrix (S4) e Layer (if present):	C) ce (A11)	 	Stripped Loamy M Loamy O Depleted Redox D Depleted Redox D Vernal F	d Matrix (S Mucky Mi Gleyed M d Matrix (Dark Surfa d Dark Su Depressio Pools (F9	S) neral (F1) latrix (F2) (F3) ace (F6) urface (F7 ons (F8)))	2 cm Muck (A9 2 cm Muck (A1 Reduced Vertic Red Parent Ma Other (Explain ³ Indicators wetland unless	0) (LRR B) c (F18) terial (TF2) in Remarks) of hydrophytic vegetation and hydrology must be present, o disturbed or problematic.
Histo Histo Black Hydro Strati Deplo Deplo Thick Sand Restrictiv	c Epipedon (A2) k Histic (A3) ogen Sulfide (A4) ified Layers (A5) (LRR Muck (A9) (LRR D) eted Below Dark Surface k Dark Surface (A12) hy Mucky Mineral (S1) hy Gleyed Matrix (S4) e Layer (if present): edrock	C) ce (A11)		Stripped Loamy N Loamy O Depleted Redox D Depleted Redox D Vernal F	d Matrix (S Mucky Mi Gleyed M d Matrix (Dark Surfa d Dark Su Depressio Pools (F9	5) neral (F1) latrix (F2) (F3) ace (F6) urface (F7 ons (F8)))	2 cm Muck (A9 2 cm Muck (A1 Reduced Vertic Red Parent Ma Other (Explain ³ Indicators wetland unless	0) (LRR B) (F18) terial (TF2) in Remarks) of hydrophytic vegetation and hydrology must be present, disturbed or problematic.

HIDROLOGI									
Wetland Hydrology Indica	ators:								
Primary Indicators (minimu	m of one requ	uired; che	ck all that apply)		Secondary Indicators (2 or more required)				
Surface Water (A1)			Salt Crust (B11)		Water Marks (B1) (Riverine)				
High Water Table (A2	2)		Biotic Crust (B12)		Sediment Deposits (B2) (Riverine)				
Saturation (A3)			Aquatic Invertebrates (B13)		Drift Deposits (B3) (Riverine)				
Water Marks (B1) (No	onriverine)		 Hydrogen Sulfide Odor (C1)		X Drainage Patterns (B10)				
Sediment Deposits (E	32) (Nonriver	ine)	Oxidized Rhizospheres along Li	ving Roots (C3)	Dry-Season Water Table (C2)				
X Drift Deposits (B3) (N	onriverine)	Crayfish Burrows (C8)							
Surface Soil Cracks (B6)		Recent Iron Reduction in Tilled	Soils (C6)	X Saturation Visible on Aerial Imagery (C9)				
Inundation Visible on	Aerial Imager	ry (B7)	Thin Muck Surface (C7)		Shallow Aquitard (D3)				
Water-Stained Leave	s (B9)		Other (Explain in Remarks)		FAC-Neutral Test (D5)				
Field Observations:									
Surface Water Present?	Yes	No	X Depth (inches):						
Water Table Present?	Yes	No	X Depth (inches):						
Saturation Present?	Yes	No	X Depth (inches):	Wetland H	lydrology Present? Yes X No				
(includes capillary fringe)									
Describe Recorded Data (stre	eam gauge, n	nonitoring	well, aerial photos, previous inspec	ctions), if availab	le:				
	<u> </u>								
Remarks: Exhibits signs of se	asonal draina	age							

Project/Site:	Green Business Park Loomis			City/County: Loomis, Placer Cour			inty	Sampling Date	:	10/17/18
Applicant/Owner:	Mima Capital,	LLC.					State: CA	Sampling Poin	t: DP4	
Investigator(s):	Matt Shaffer			Section,	Township,	Range:	State: S8, T11N, F	R7E		
Landform (hillslop	e, terrace, etc.)	hillslope		Local relie	ef (concave	, conve	x, none): <u>convex</u>	S	ope (%):	5
Subregion (LRR):	Mediterranean	California (LRR C)	Lat:		38.81	319911	Long:	-121.2137926	Datum:	NAD 83
Soil Map Unit Nam	ne: <u>(106)</u> A	ndregg coarse sandy loa	am, 2-9% s	slopes			NWI Classification:	None		
Are climatic / hydr	ologic conditior	s on the site typical for t	his time of	year?	Yes	Х	No	_(If no, explain in I	Remarks.)
Are Vegetation	, Soil	, or Hydrology		significantly d	listurbed?	Are "I	Normal Circumstand	ces" present? Ye	es X	No
Are Vegetation	, Soil	, or Hydrology		naturally prob	lematic?	(If nee	eded, explain any ar	nswers in Remarks	.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No	X X X	Is the Sampled Area within a Wetland?	Yes	No <u>X</u>	
Remarks: Upland paird point with DI	Ps 3 and 5.						

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species
.1.				That Are OBL, FACW, or FAC: 0 (A)
2.				Total Number of Dominant
3		·		Species Across All Strata: 0 (B)
4		<u> </u>		Percent of Dominant Species
	0	=Total Cover	•	That Are OBL, FACW, or FAC:(A/B)
Sapling/Shrub Stratum (Plot size:)				Prevalence Index Worksheet:
1				Total % Cover of: Multiply by:
2		<u> </u>		OBL species 0 x1 = 0
3		<u> </u>		FACW species x2 = 0
4				FAC species 0 x3 = 0
5				FACU species 0 x4 = 0
	0	=Total Cover	r <u> </u>	UPL species 10 x5 = 50
<u>Herb Stratum</u> (Plot size: <u>1 meter²</u>)	_			Column Totals: 10 (A) 50 (B)
1. Centaurea solstitialis	10		UPL	Prevalence Index = B/A = 5.0
2. Erodeum botrys	Т		FACU	
3. Unknown seedling	3		N/A	Hydrophytic Vegetation Indicators:
4. Unknown seedling	2		N/A	Dominance Test is >50%
5. Unknown seedling	Т		N/A	Prevalence Index is ≤3.0 ¹
6				Morphological Adaptationd ¹ (Provide supporting
7.				data in Remarks or on a separate sheet)
8.				Problematic Hydrophytic Vegetation ¹ (Explain)
	15	=Total Cover		
Woody Vine Stratum (Plot size:)		•		¹ Indicators of hydric soil and wetland hydrology must
1.				be present, unless disturbed or problematic.
2.				Uudronhutio
	0	=Total Cover	r	Vegetation
% Bare Cround in Herb Stratum 85	% Cover of	Biotic Crust	0	Dresent2 Voc No Y

Remarks: Heavily grazed. Portion of cover consists of unknown seedlings that cannot be identified this time of the year. Hydrophytic vegetation indicator determined based on known associated vegetation, soil, and hydrology.

SOIL

Depth	Matrix		Re	dox Features				
inches)	Color (moist)	%	Color (moist)	% Type ¹	Loc ²	Texture	Rema	rks
-2	7.5YR 2.5/2	100				loam		
ND0: C-	Concentration D-Depletic		duced Matrix CS-C	averad or Coated St	and Crains	² Location: DL-Poro Liping	M-Motrix	
ype. C-				overed of Coaled Sa	anu Grains.			
ydric So	oil Indicators: (Applica	able to all	LRRs, unless o	therwise noted.)		Indicators for Problem	natic Hydric Soils	³ :
Hist	osol (A1)		Sandy	Redox (S5)		1 cm Muck (A9) (I	.RR C)	
Histi	c Epipedon (A2)		Strippe	d Matrix (S6)		2 cm Muck (A10)	(LRR B)	
Blac	k Histic (A3)		Loamy	Mucky Mineral (F1)	Reduced Vertic (F	18)	
Hyd	rogen Sulfide (A4)		Loamy	Gleyed Matrix (F2)	Red Parent Mater	ial (TF2)	
		C)	Deplete	ed Matrix (F3)		Other (Explain in I	Remarks)	
Stra	tified Layers (A5) (LRR	U)		(i i)			, , , , , , , , , , , , , , , , , , , ,	
Stra 1 cm	n Muck (A9) (LRR D)	C)	Redox	Dark Surface (F6)			,	
Stra 1 cm Dep	tified Layers (A5) (LRR n Muck (A9) (LRR D) leted Below Dark Surfac	c) ce (A11)	Redox Deplete	Dark Surface (F6) d Dark Surface (F	7)		,	
Stra 1 cm Dep Thic	tified Layers (A5) (LRR n Muck (A9) (LRR D) leted Below Dark Surfac k Dark Surface (A12)	ce (A11)	Redox Deplete Redox	Dark Surface (F6) d Dark Surface (F Depressions (F8)	7)	³ Indicators of		ation and
Stra 1 cm Dep Thic San	tified Layers (A5) (LRR n Muck (A9) (LRR D) leted Below Dark Surfac k Dark Surface (A12) dy Mucky Mineral (S1)	ce (A11)	Redox Deplete Redox Vernal	Dark Surface (F6) d Dark Surface (F Depressions (F8) Pools (F9)	7)	³ Indicators of wetland hy	hydrophytic vegeta	ation and resent,
Stra 1 cm Dep Thic San San	tified Layers (A5) (LRR n Muck (A9) (LRR D) leted Below Dark Surfac k Dark Surface (A12) dy Mucky Mineral (S1) dy Gleyed Matrix (S4)	c) ce (A11)	Redox Deplete Redox Vernal	Dark Surface (F6) Dark Surface (F6) Depressions (F8) Pools (F9)	7)	³ Indicators of wetland hy unless di	hydrophytic vegeta drology must be pr sturbed or problem	ation and resent, natic.
Stra 1 cm Dep Thic San San	tified Layers (A5) (LRR n Muck (A9) (LRR D) leted Below Dark Surfac k Dark Surface (A12) dy Mucky Mineral (S1) dy Gleyed Matrix (S4) /e Layer (if present):	c) ce (A11)	Redox Deplete Redox Vernal	Dark Surface (F6) ad Dark Surface (F Depressions (F8) Pools (F9)	7)	³ Indicators of wetland hy unless di	hydrophytic vegeta drology must be pr sturbed or problem	ation and resent, natic.
Stra 1 cm Dep Thic San San Restrictiv	tified Layers (A5) (LRR n Muck (A9) (LRR D) leted Below Dark Surfac k Dark Surface (A12) dy Mucky Mineral (S1) dy Gleyed Matrix (S4) /e Layer (if present): edrock	c) ce (A11)	Redox Deplete Redox Vernal	Dark Surface (F6) Dark Surface (F6) Depressions (F8) Pools (F9)	7)	³ Indicators of wetland hy unless di	hydrophytic vegeta drology must be pr sturbed or problem	ation and resent, natic.
Stra 1 cm Dep Thic San San testrictiv	tified Layers (A5) (LRR n Muck (A9) (LRR D) leted Below Dark Surfac k Dark Surface (A12) dy Mucky Mineral (S1) dy Gleyed Matrix (S4) ve Layer (if present): edrock ches):	c) ce (A11)	Redox Deplete Redox Vernal	Dark Surface (F6) d Dark Surface (F Depressions (F8) Pools (F9)	7) Hy	³ Indicators of wetland hy unless di rdric Soil Present?	hydrophytic vegeta drology must be pr sturbed or problem Yes	ation and resent, natic. No

HIDROLOGI	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1) Salt Crust (B11)	Water Marks (B1) (Riverine)
High Water Table (A2) Biotic Crust (B12) Sediment Deposits (B2) (Riverine)
Saturation (A3) Aquatic Invertebr	ates (B13) Drift Deposits (B3) (Riverine)
Water Marks (B1) (Nonriverine) Hydrogen Sulfide	Odor (C1) Drainage Patterns (B10)
Sediment Deposits (B2) (Nonriverine) Oxidized Rhizos	wheres along Living Roots (C3) Dry-Season Water Table (C2)
Drift Deposits (B3) (Nonriverine) Presence of Red	uced Iron (C4) Crayfish Burrows (C8)
Surface Soil Cracks (B6) Recent Iron Redu	uction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Inundation Visible on Aerial Imagery (B7) Thin Muck Surface	ce (C7) Shallow Aquitard (D3)
Water-Stained Leaves (B9) Other (Explain in	Remarks) FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes <u>No X</u> Depth (inches)	
Water Table Present? Yes <u>No X</u> Depth (inches)	
Saturation Present? Yes No X Depth (inches)	Wetland Hydrology Present? Yes No X
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, r	revious inspections), if available:
Demonstry Machardania propert	
Remarks: No hydrology present.	

Project/Site:	Green Busir	ness Park Loomis	City/County:	ity/County: Loomis, Placer County			Sampling Date	:	10/17/18
Applicant/Owner:	Mima Capita	al, LLC.				State: CA	Sampling Poin	t: <u>DP5</u>	
Investigator(s):	Matt Shaffer	-	Section	n, Township,	Range:	State: S8, T11N, F	R7E		
Landform (hillslop	e, terrace, et	c.): <u>hillslope</u>	Local re	elief (concave	, convex	k, none): <u>concave</u>	S	ope (%): <u><</u>	2
Subregion (LRR):	Mediterrane	an California (LRR C) L	.at:	38.81	274209	Long:	-121.2141316	Datum: N	IAD 83
Soil Map Unit Nan	ne: <u>(106</u>) Andregg coarse sandy loam, 2-9	% slopes			NWI Classification:	None		
Are climatic / hydr	ologic condit	ions on the site typical for this time	e of year?	Yes	Х	No	(If no, explain in I	Remarks.)	
Are Vegetation	, Soi	l, or Hydrology	significantly	disturbed?	Are "I	Normal Circumstanc	es" present? Ye	es <u>X</u> N	lo
Are Vegetation	, Soi	l, or Hydrology	naturally pro	oblematic?	(If nee	eded, explain any an	swers in Remarks	s.)	

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	X X X	No No	Is the Sampled Area within a Wetland?	Yes _	x	No
Remarks: Stock pond utilized by cattl southern side.	e for drii	nking.	Evidence	neavy trampling and mucky with r	ninimal vegeta	tion. Po	nd supported by man-made berm along

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:
		·		
3.		·		Species Across All Strata: 0 (B)
4	0	=Total Cover		Percent of Dominant Species That Are OBL, FACW, or FAC:0% (A/B)
Sapling/Shrub Stratum (Plot size:)				Prevalence Index Worksheet:
1				Total % Cover of: Multiply by:
2				OBL species <u>1</u> x1 = <u>1</u>
3				FACW species x2 =0
4				FAC species x3 = 0
5				FACU species 0 x4 = 0
	0	=Total Cover	-	UPL species 0 x5 = 0
Herb Stratum (Plot size: <u>1 meter²</u>)				Column Totals: 1 (A) 1 (B)
1. Lythrum hyssopifolium	1		OBL	Prevalence Index = B/A = 1.0
2. Unknown seedling	1		N/A	
3.				Hydrophytic Vegetation Indicators:
4.				Dominance Test is >50%
5.				X Prevalence Index is ≤3.0 ¹
6.				Morphological Adaptationd ¹ (Provide supporting
7.				data in Remarks or on a separate sheet)
8.				Problematic Hydrophytic Vegetation ¹ (Explain)
	2	=Total Cover	-	
Woody Vine Stratum (Plot size:) 1				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2				Hydronhytic
	0	=Total Cover		Vegetation
% Bare Ground in Herb Stratum98*	% Cover of	Biotic Crust		Present? Yes X No

Remarks: *Mostly bare mud, some leaf litter, algae. Unknown seedling cannot be identified this time of the year. Hydrophytic vegetation indicator determined based on known associated vegetation, soil, and hydrology.

SOIL

Depth	Matrix		Re	dox Feat	ures			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-1	2.5Y 2.5/1	100					silt loam	mucky
1-9	10YR 3/2	70	7.5YR 3/4	25	С	М	sandy loam	
			10R 3/4	5	С	М		
9-12	10YR 3/2	95	2.5YR 2.5/2	5	С	М	sandy loam	
¹ Type: C=	Concentration, D=Depletic	on, RM=R	educed Matrix, CS=C	overed or	Coated Sa	Ind Grains.	² Location: PL=Por	e Lining, M=Matrix.
Hydric So	oil Indicators: (Applic	able to a	III LRRs, unless o	herwise	noted.)		Indicators for P	roblematic Hydric Soils ³ :
Histo	osol (A1)		Sandy	Redox (S	5)		X 1 cm Muck	(A9) (LRR C)
Histi	c Epipedon (A2)		Strippe	d Matrix (S6)		2 cm Muck	(A10) (LRR B)
Blac	k Histic (A3)		Loamy	Mucky Mi	neral (F1))	Reduced V	ertic (F18)
Hydi	rogen Sulfide (A4)		Loamy	Gleyed M	atrix (F2))	Red Parent	t Material (TF2)
Stra	tified Layers (A5) (LRR	C)	Deplete	d Matrix ((F3)		Other (Exp	lain in Remarks)
1 cm Depl Thic Sand Sand	n Muck (A9) (LRR D) leted Below Dark Surfac k Dark Surface (A12) dy Mucky Mineral (S1) dy Gleyed Matrix (S4)	ce (A11)	X Redox Deplete Redox Vernal	Dark Surf d Dark S Depressic Pools (F9	ace (F6) urface (F7 ons (F8))	7)	³ Indica wetl un	tors of hydrophytic vegetation and and hydrology must be present, less disturbed or problematic.
Restrictiv	ve Layer (if present):							
Туре:						Hy	dric Soil Present?	Yes X No
Type: Depth (ind	ches):							

Watland Uvdralagy Indiantara				
Wetland Hydrology Indicators:	· · · · · · · · · · · · · · · · · · ·			
Primary Indicators (minimum of one required; ch	eck all that apply)	Secondary Indicators (2 or more required)		
Surface Water (A1)	Salt Crust (B11)	Water Marks (B1) (Riverine)		
High Water Table (A2)	X Biotic Crust (B12)	Sediment Deposits (B2) (Riverine)		
X Saturation (A3)	Aquatic Invertebrates (B13)	Drift Deposits (B3) (Riverine)		
X Water Marks (B1) (Nonriverine)	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)		
Sediment Deposits (B2) (Nonriverine)	Oxidized Rhizospheres along Living Roots (C3)	Dry-Season Water Table (C2)		
Drift Deposits (B3) (Nonriverine)	Presence of Reduced Iron (C4)	Crayfish Burrows (C8)		
Surface Soil Cracks (B6)	Recent Iron Reduction in Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9)		
X Inundation Visible on Aerial Imagery (B7)	X Thin Muck Surface (C7)	Shallow Aquitard (D3)		
X Water-Stained Leaves (B9)	Other (Explain in Remarks)	FAC-Neutral Test (D5)		
Field Observations:				
Surface Water Present? Yes No	X Depth (inches):			
Water Table Present? Yes No	X Depth (inches):			
Saturation Present? Yes X No	Depth (inches): 0 Wetland H	Hydrology Present? Yes X No		
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitorin	g well, aerial photos, previous inspections), if availabl	e:		
Remarks: Intermittent/perennial ponding of water				
l				

Project/Site:	Green Business Park Loomis City/County:				Loomis, Pla	cer Cou	nty	Sampling Date:	10/17/18
Applicant/Owner:	Mima Capital,	LLC.					State: CA	Sampling Point:	DP6
Investigator(s):	Matt Shaffer			Section,	Township,	Range:	State: S8, T11N, F	R7E	
Landform (hillslop	e, terrace, etc.): <u>terrace</u>		Local relie	ef (concave,	, conve	k, none): <u>concave</u>	Slop	oe (%): <u><2</u>
Subregion (LRR):	Mediterranea	n California (LRR C)	Lat:		38.813	379436	Long:	-121.2108983	Datum: NAD 83
Soil Map Unit Nam	ne: <u>(106)</u>	Andregg coarse sandy loa	am, 2-9% s	lopes			NWI Classification:	None	
Are climatic / hydr	ologic conditio	ns on the site typical for tl	his time of	year?	Yes	Х	No	_(If no, explain in Re	emarks.)
Are Vegetation	, Soil	, or Hydrology		significantly d	isturbed?	Are "I	Normal Circumstand	ces" present? Yes	<u>X</u> No
Are Vegetation	, Soil	, or Hydrology		naturally prob	lematic?	(If nee	eded, explain any ar	nswers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	X X	No No No	X	Is the Sampled Area within a Wetland?	Yes	Νοχ
Remarks: Suspect point in area of tal but no indicators of hydrology.	I, thick F	estuca	a perer	nnis, imme	ditely adjacent to grazed swal	e. Exhibits margin	al wetland vegetation (Festuca) and soils,

VEGETATION – Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species	Status	Number of Dominant Species
1				1 (A)
2		·		Total Number of Dominant
3		·		Species Across All Strata:(B)
4		·		Percent of Dominant Species
	0	=Total Cover		That Are OBL, FACW, or FAC:(A/B)
Sapling/Shrub Stratum (Plot size:)				Prevalence Index Worksheet:
1				Total % Cover of: Multiply by:
2				OBL species x1 =0
3				FACW species x2 =0
4				FAC species 100 x3 = 300
5				FACU species 0 x4 = 0
	0	=Total Cover		UPL species 0 x5 = 0
Herb Stratum (Plot size: <u>1 meter²</u>)				Column Totals: 100 (A) 300 (B)
1. Festuca perennis	100	Y	FAC	Prevalence Index = B/A = 3.0
2. <u>Rumex crispus</u>	Т		FAC	
3				Hydrophytic Vegetation Indicators:
4				X Dominance Test is >50%
5				X Prevalence Index is $\leq 3.0^1$
6				Morphological Adaptationd ¹ (Provide supporting
7				data in Remarks or on a separate sheet)
8				Problematic Hydrophytic Vegetation ¹ (Explain)
	100	=Total Cover		
Woody Vine Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1				be present, unless disturbed or problematic.
2				Hydrophytic
	0	=Total Cover		Vegetation
% Bare Ground in Herb Stratum 0	% Cover of	Biotic Crust	0	Present? Yes X No
Remarks:				

SOIL	
------	--

epth	Matrix		Redox Fea	tures					
nches)	Color (moist)	%	Color (moist) %	vist) % Type ¹ Lo		Texture	Remarks		
-10	10YR 3/2	90	7.5YR 3/4 10	С	PL, M	silt loam			
-									
						<u> </u>			
			<u> </u>			<u> </u>			
			<u> </u>						
Vpe: C=0	Concentration. D=Depletio	n. RM=Re	duced Matrix. CS=Covered o	r Coated Sar	d Grains.	² Location: PL=Pore Lining.	M=Matrix.		
71 -	- , .	,	,	-		ς,	2		
ydric So	oil Indicators: (Applica	able to a	I LRRs, unless otherwise	noted.)		Indicators for Problem	atic Hydric Soils ³ :		
Histo	osol (A1)		Sandy Redox (S	\$5)		1 cm Muck (A9) (L	RR C)		
Histi	c Epipedon (A2)		Stripped Matrix	(S6)		2 cm Muck (A10) (I	LRR B)		
Blac	k Histic (A3)		Loamy Mucky M	lineral (F1)		Reduced Vertic (F	18)		
Hydr	ogen Sulfide (A4)		Loamy Gleyed N	Matrix (F2)		Red Parent Material (TF2)			
Strat	tified Layers (A5) (LRR	C)	Depleted Matrix	(F3)		Other (Explain in Remarks)			
1 cm	n Muck (A9) (LRR D)		X Redox Dark Sur	face (F6)					
Depl	eted Below Dark Surfac	æ (A11)	Depleted Dark S	Surface (F7)				
Thicl	k Dark Surface (A12)		Redox Depress	ons (F8)		³ Indicators of t	wdronbytic vegetation and		
Sand	dy Mucky Mineral (S1)		Vernal Pools (F	9)		wetland hvd	rology must be present.		
Sand	dy Gleyed Matrix (S4)					unless dis	turbed or problematic.		
	ve Layer (if present):								
Restrictiv									
Restrictiv Type:						uluia Call Duasaut?	Vac X No		
Restrictiv ⁻ ype:)epth (inc	ches):				ну	aric Soli Present?			

HYDROLOGY						
Wetland Hydrology Indicators:						
Primary Indicators (minimum of one required; check	د all that apply)	Secondary Indicators (2 or more required)				
Surface Water (A1)	Salt Crust (B11)	Water Marks (B1) (Riverine)				
High Water Table (A2)	Biotic Crust (B12)	Sediment Deposits (B2) (Riverine)				
Saturation (A3)	Aquatic Invertebrates (B13)	Drift Deposits (B3) (Riverine)				
Water Marks (B1) (Nonriverine)	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)				
Sediment Deposits (B2) (Nonriverine)	Oxidized Rhizospheres along Living Roots	g Roots (C3) Dry-Season Water Table (C2)				
Drift Deposits (B3) (Nonriverine)	Presence of Reduced Iron (C4)	Crayfish Burrows (C8)				
Surface Soil Cracks (B6)	Recent Iron Reduction in Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9)				
Inundation Visible on Aerial Imagery (B7)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Water-Stained Leaves (B9)	Other (Explain in Remarks)	FAC-Neutral Test (D5)				
Field Observations:						
Surface Water Present? Yes No _X	. Depth (inches):					
Water Table Present? Yes No _X	. Depth (inches):					
Saturation Present? Yes No X	Depth (inches): Wet!	land Hydrology Present? Yes <u>No X</u>				
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring w	vell, aerial photos, previous inspections), if a	vailable:				
D I M simo of herdesis as						
Remarks: No signs of hydrology						

Project/Site:	Green Busin	ess Park Loomis	City/County: Loomis, Placer Cour			inty	Sampling Date:		10/18/18	
Applicant/Owner:	Mima Capita	l, LLC.					State: CA	Sampling Point:	DP7	
Investigator(s):	Matt Shaffer			Section,	Township,	Range:	State: S8, T11N, F	R7E		
Landform (hillslop	e, terrace, etc	.): <u>terrace</u>		Local relie	ef (concave	, conve	x, none): <u>none</u>	Slo	pe (%):	<1
Subregion (LRR):	Mediterranea	n California (LRR C)	Lat:		38.812	240746	Long:	-121.2112944	Datum: I	NAD 83
Soil Map Unit Nan	ne: <u>(106)</u>	Andregg coarse sandy loa	ım, 2-9% s	lopes			NWI Classification:	None		
Are climatic / hydr	ologic conditi	ons on the site typical for th	nis time of	year?	Yes	Х	No	_(If no, explain in R	emarks.)	
Are Vegetation	, Soil	, or Hydrology		significantly d	isturbed?	Are "	Normal Circumstand	es" present? Yes	<u> </u>	No
Are Vegetation	, Soil	, or Hydrology		naturally prob	lematic?	(If nee	eded, explain any an	swers in Remarks.))	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes _	X X X	No No	Is the Sampled Area within a Wetland?	Yes _	x	_ No	
Remarks: Widened swale area. May	y have exp	periend	ced pond	d water due to neaby culvert constru	ction work.			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species
1. Quercus lobata	15	·	FACU	That Are OBL, FACW, or FAC: 0 (A)
2.		·		Total Number of Dominant
3.				Species Across All Strata: 0 (B)
4.				Percent of Dominant Species
	15	=Total Cover	r	That Are OBL, FACW, or FAC: 0% (A/B)
Sapling/Shrub Stratum (Plot size:)				Prevalence Index Worksheet:
1				Total % Cover of: Multiply by:
2				OBL species 0 x1 = 0
3				FACW species x2 =0
4				FAC species <u>6</u> x3 = <u>18</u>
5				FACU species 15 x4 = 60
	0	=Total Cover	r	UPL species x5 =0
<u>Herb Stratum</u> (Plot size: <u>1 meter²</u>)				Column Totals: 21 (A) 78 (B)
1. Portulaca oleracea	6		FAC	Prevalence Index = B/A = 3.7
2. Lythrum hyssopifolium	Т		OBL	
3. Rumex crispus	Т		FAC	Hydrophytic Vegetation Indicators:
4. Cynodon dactylon	Т		FACU	Dominance Test is >50%
5. Cyperus eragrostis	Т		FACW	Prevalence Index is ≤3.0 ¹
6. Unknown seedling	4		N/A	Morphological Adaptationd ¹ (Provide supporting
7.				data in Remarks or on a separate sheet)
8.				Problematic Hydrophytic Vegetation ¹ (Explain)
	10	=Total Cover	r	
Woody Vine Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1.				be present, unless disturbed or problematic.
2				Hydrophytic
	0	=Total Cover	r —	Vegetation
% Bare Ground in Herb Stratum 90*	% Cover of	Biotic Crust		Present? Yes X No

Remarks: *Good portion covered in algal crust. Unknown seedling cannot be identified this time of the year. Hydrophytic vegetation indicator determined based on known associated vegetation, soil, and hydrology, despite prevalence >3.0.

SOIL

Depth	Matrix		Re	dox Feat	ures		_			
(inches)	Color (moist)	%	Color (moist)	st) % Type ¹		Loc ²	Texture	Remarks		
0-3	10YR 3/2	100					silty clay loam			
3-10	10YR 3/2	95	5YR 3/4	5	С	С	loam			
							·			
							- <u></u>			
					·					
		·			·		·			
ype: C=0	Concentration, D=Depletic	on, RM=R	educed Matrix, CS=C	overed or	Coated Sa	nd Grains.	² Location: PL=Pore Lining	ı, M=Matrix.		
ydric Sc	oil Indicators: (Application)	able to a	II LRRs, unless of	therwise	noted.)		Indicators for Problem	natic Hydric Soils ³ :		
Histo	osol (A1)		Sandy I	Redox (S	5)		1 cm Muck (A9) (L	_RR C)		
Histic Epipedon (A2) Stripped Matrix (S6)							2 cm Muck (A10) (LRR B)			
Histi	c Epipedon (A2)		Strippe	d Matrix (S6)		2 cm Muck (A10)	(LRR B)		
Histi Blac	c Epipedon (A2) k Histic (A3)		Loamy	d Matrix (Mucky M	ineral (F1))	2 cm Muck (A10) (Reduced Vertic (F	(LRR B) 18)		
Histi Black Hydr	с Еріреdon (А2) k Histic (А3) ogen Sulfide (А4)		Supper Loamy Loamy	d Matrix (Mucky M Gleyed N	ineral (F1) Iatrix (F2))	2 cm Muck (A10) (Reduced Vertic (F Red Parent Materi	(LRR B) ⁻ 18) ial (TF2)		
Histi Blaci Hydr Strat	с Еріредоп (А2) k Histic (А3) ogen Sulfide (А4) ified Layers (А5) (LRR	C)	Loamy Loamy Deplete	d Matrix (Mucky M Gleyed M ed Matrix	ineral (F1) Iatrix (F2) (F3))	2 cm Muck (A10) (Reduced Vertic (F Red Parent Materi Other (Explain in F	(LRR B) 18) ial (TF2) Remarks)		
Histi Blaci Hydr Strat 1 cm	c Epipedon (A2) k Histic (A3) ogen Sulfide (A4) ified Layers (A5) (LRR I Muck (A9) (LRR D)	C)	Loamy Loamy Deplete X Redox	d Matrix (Mucky M Gleyed M ed Matrix Dark Surl	S6) ineral (F1) /atrix (F2) (F3) face (F6))	2 cm Muck (A10) (Reduced Vertic (F Red Parent Materi Other (Explain in F	(LRR B) 18) ial (TF2) Remarks)		
Histi Blac Hydr Strat 1 cm Depl	c Epipedon (A2) k Histic (A3) ogen Sulfide (A4) ified Layers (A5) (LRR Muck (A9) (LRR D) eted Below Dark Surfac	C) ce (A11)	Loamy Loamy Deplete X Redox	d Matrix (Mucky M Gleyed M ed Matrix Dark Surf ed Dark S	ineral (F1) Matrix (F2) (F3) face (F6) Surface (F7))) 7)	2 cm Muck (A10) (Reduced Vertic (F Red Parent Materi Other (Explain in F	(LRR B) 18) ial (TF2) Remarks)		
Histi Black Hydr Strat 1 cm Depl Thicl	c Epipedon (A2) k Histic (A3) ogen Sulfide (A4) ified Layers (A5) (LRR I Muck (A9) (LRR D) eted Below Dark Surfac k Dark Surface (A12)	C) ce (A11)	Loamy Loamy Deplete Redox Deplete Deplete	d Matrix (Mucky M Gleyed M ed Matrix Dark Surf ed Dark S Depressio	S6) ineral (F1 /atrix (F2 (F3) face (F6) surface (F7 ons (F8))) 7)	2 cm Muck (A10) (Reduced Vertic (F Red Parent Materi Other (Explain in F	(LRR B) 18) ial (TF2) Remarks)		
Histi Blac Hydr Strat 1 cm Depl Thicl	c Epipedon (A2) k Histic (A3) ogen Sulfide (A4) ified Layers (A5) (LRR I Muck (A9) (LRR D) eted Below Dark Surface k Dark Surface (A12) dy Mucky Mineral (S1)	C) ce (A11)	Loamy Loamy Deplete Redox Redox Redox	d Matrix (Mucky M Gleyed M ed Matrix Dark Surf ed Dark S Depressie Pools (F§	S6) ineral (F1) fatrix (F2) face (F6) furface (F7) ons (F8) o))) 7)	2 cm Muck (A10) (Reduced Vertic (F Red Parent Materi Other (Explain in F	(LRR B) 18) ial (TF2) Remarks) hydrophytic vegetation and drology must be present		
Histi Blacl Hydr Strat Depl Thicl Sand Sand	c Epipedon (A2) k Histic (A3) ogen Sulfide (A4) ified Layers (A5) (LRR Muck (A9) (LRR D) eted Below Dark Surfac k Dark Surface (A12) dy Mucky Mineral (S1) dy Gleyed Matrix (S4)	C) ce (A11)	Loamy Loamy Deplete X Redox Deplete Redox Vernal	d Matrix (Mucky M Gleyed M ed Matrix Dark Surl ed Dark S Depressie Pools (FS	S6) ineral (F1) fatrix (F2) face (F6) furface (F7) ons (F8) 0))) 7)	2 cm Muck (A10) (Reduced Vertic (F Red Parent Materi Other (Explain in F ³ Indicators of wetland hyd unless dis	(LRR B) 18) ial (TF2) Remarks) hydrophytic vegetation and drology must be present, sturbed or problematic.		
Histi Black Hydr Strat Depl Thick Sand Sand	c Epipedon (A2) k Histic (A3) ogen Sulfide (A4) ified Layers (A5) (LRR h Muck (A9) (LRR D) eted Below Dark Surfac k Dark Surface (A12) dy Mucky Mineral (S1) dy Gleyed Matrix (S4) re Layer (if present):	C) ce (A11)	Loamy Loamy Deplete Redox Redox Redox	d Matrix (Mucky M Gleyed M ed Matrix Dark Surf ed Dark S Depressio Pools (F9	S6) ineral (F1) (F3) face (F6) surface (F7) ons (F8))) 7)	2 cm Muck (A10) (Reduced Vertic (F Red Parent Materi Other (Explain in F ³ Indicators of wetland hyd unless dis	(LRR B) ial (TF2) Remarks) hydrophytic vegetation and drology must be present, sturbed or problematic.		
Histi Blaci Hydr Strat Depl Thici Sanc Sanc	c Epipedon (A2) k Histic (A3) ogen Sulfide (A4) ified Layers (A5) (LRR Muck (A9) (LRR D) eted Below Dark Surface k Dark Surface (A12) dy Mucky Mineral (S1) dy Gleyed Matrix (S4) re Layer (if present):	C) ce (A11)	Loamy Loamy Deplete Redox Vernal	d Matrix (Mucky M Gleyed M ed Matrix Dark Surf ed Dark S Depressie Pools (F9	S6) ineral (F1) face (F3) face (F6) furface (F7) ons (F8) 9))) 7)	2 cm Muck (A10) (Reduced Vertic (F Red Parent Materi Other (Explain in F ³ Indicators of wetland hyd unless dis	(LRR B) ial (TF2) Remarks) hydrophytic vegetation and drology must be present, sturbed or problematic.		

HIDROLOGI										
Wetland Hydrology Indica	ators:									
Primary Indicators (minimu	m of one requir	ed; che	eck a	all that apply)		Secondary Indicators (2 or more required)				
Surface Water (A1)			X	Salt Crust (B11)		Water Marks (B1) (Riverine)				
High Water Table (A2	<u>?)</u>		X	Biotic Crust (B12)		Sediment Deposits (B2) (Riverine)				
Saturation (A3) Aquatic Invertebrates (B13)						Drift Deposits (B3) (Riverine)				
X Water Marks (B1) (No	onriverine)			Hydrogen Sulfide Odor (C1)		Drainage Patterns (B10)				
Sediment Deposits (E	32) (Nonriverin	e)		Oxidized Rhizospheres along Living	Roots (C3)	Dry-Season Water Table (C2)				
Drift Deposits (B3) (N	onriverine)		Crayfish Burrows (C8)							
X Surface Soil Cracks (B6)	(C6)	Saturation Visible on Aerial Imagery (C9)							
X Inundation Visible on	Aerial Imagery	(B7)		Thin Muck Surface (C7)		Shallow Aquitard (D3)				
X Water-Stained Leave	s (B9)			Other (Explain in Remarks)		FAC-Neutral Test (D5)				
Field Observations:										
Surface Water Present?	Yes	No	Х	Depth (inches):						
Water Table Present?	Yes	No	Х	Depth (inches):						
Saturation Present?	Yes	No	Х	Depth (inches):	Wetland H	ydrology Present? Yes X No				
(includes capillary fringe)										
Describe Recorded Data (stre	eam gauge, mo	onitoring	g we	ll, aerial photos, previous inspections	s), if available	e:				
	<u> </u>									
Remarks: Evidence of seaso	nal ponded wat	er								

Project/Site:	Green Business Park Loomis				City/County: Loomis, Placer County			inty	y Sampling Date		10/18/18
Applicant/Owner:	Mima Cap	ital, LLC.						State: CA	Sampling Po	oint: <u>DP8</u>	
Investigator(s):	Matt Shaff	er			Section	, Township,	Range:	State: S8, T11N, F	R7E		
Landform (hillslop	e, terrace,	etc.):	hillslope		Local reli	ief (concave	, conve	k, none): <u>concave</u>		Slope (%):	5
Subregion (LRR):	Mediterrar	nean Calif	ornia (LRR C)	Lat:		38.81	399391	Long:	-121.2173458	Datum:	NAD 83
Soil Map Unit Nan	ne: <u>(19</u>	94) Xeroflu	vents, frequently	flooded				NWI Classification:	None		
Are climatic / hydr	ologic cond	ditions on	the site typical for	this time of	year?	Yes	Х	No	_(If no, explain i	in Remarks.)
Are Vegetation	, S	oil	, or Hydrology		significantly of	disturbed?	Are "	Normal Circumstand	ces" present?	Yes X	No
Are Vegetation	, S	oil	, or Hydrology		naturally prol	blematic?	(If nee	eded, explain any ar	nswers in Rema	rks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No	X X X	Is the Sampled Area within a Wetland?	Yes	No X	
Remarks: Point taken in old remnan	t ditch.						

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species
. Quercus wislizeni	80	Y	UPL	That Are OBL, FACW, or FAC: (A)
<u>.</u>				Total Number of Dominant
3.		·		Species Across All Strata: (B)
i.				Percent of Dominant Species
	80	=Total Cove	r	That Are OBL, FACW, or FAC:(A/B)
Sapling/Shrub Stratum (Plot size:)				Prevalence Index Worksheet:
L				Total % Cover of: Multiply by:
				OBL species 0 x1 = 0
ś				FACW species 0 x2 = 0
k				FAC species 5 x3 = 15
j				FACU species 0 x4 = 0
	0	=Total Cove	r	UPL species 90 x5 = 450
<u>Herb Stratum</u> (Plot size: <u>1 meter²</u>)				Column Totals: 95 (A) 465 (B)
. Rubus armeniacus	Т		FAC	Prevalence Index = B/A = 4.9
2. Carduus pycnocephalus	10		UPL	
Rumex crispus	5		FAC	Hydrophytic Vegetation Indicators:
Cynosurus echinatus	Т		UPL	Dominance Test is >50%
5. Unknown grass	40	Y	N/A	Prevalence Index is ≤3.0 ¹
. Unknown seedling	35	Y	N/A	Morphological Adaptationd ¹ (Provide supporting
				data in Remarks or on a separate sheet)
3.				Problematic Hydrophytic Vegetation ¹ (Explain)
	90	=Total Cove		
<u>Woody Vine Stratum</u> (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Hydrophytic
	0	=Total Cove	r	Vegetation
% Bare Ground in Herb Stratum 10	% Cover of	Biotic Crust		Present? Yes No X

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SOIL

Depth	Matrix		Re	dox Featu	ures					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Rema	irks	
0-4	10YR 2/2	100	· · · · ·				loam			
4-6	7.5YR 3/2	100					sandy loam			
		······· ·					<u> </u>			
		<u> </u>				<u> </u>	2			
Type: C=0	Concentration, D=Depletion	n, RM=Rec	luced Matrix, CS=C	overed or	Coated Sar	nd Grains.	Location: PL=Pore Lining	g, M=Matrix.		
ydric So	oil Indicators: (Applica	able to all	LRRs, unless of	therwise	noted.)		Indicators for Problem	natic Hydric Soils	3 ³ :	
Histo	osol (A1)		Sandy I	Redox (S	5)		1 cm Muck (A9) (I	LRR C)		
Histi	c Epipedon (A2)		Strippe	d Matrix (S6)		2 cm Muck (A10) (LRR B)			
Blac	k Histic (A3)		Loamy	Mucky Mi	neral (F1)		Reduced Vertic (F	-18)		
Hydr	ogen Sulfide (A4)		Loamy	Gleyed M	atrix (F2)		Red Parent Mater	ial (TF2)		
Strat	tified Layers (A5) (LRR (C)	Deplete	ed Matrix ((F3)		Other (Explain in	Remarks)		
1 cm	n Muck (A9) (LRR D)		Redox	Dark Surfa	ace (F6)					
Depl	eted Below Dark Surfac	e (A11)	Deplete	d Dark S	urface (F7)				
Thic	k Dark Surface (A12)		Redox	Depressic	ons (F8)		³ Indianters of	hudrophytic yr ret	ation and	
Sand	dy Mucky Mineral (S1)		Vernal	Pools (F9)		Indicators of hydrophytic vegetation and wetland hydrology must be present			
Sand	dy Gleyed Matrix (S4)						unless di	sturbed or problen	natic.	
Restrictiv	ve Layer (if present):									
	edrock									
ype: be	1		6			Ну	dric Soil Present?	Yes	No	
Type: <u>be</u> Depth (inc	ches):									

HYDROLOGY		
Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check a	all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1)	Salt Crust (B11)	Water Marks (B1) (Riverine)
High Water Table (A2)	Biotic Crust (B12)	Sediment Deposits (B2) (Riverine)
Saturation (A3)	Aquatic Invertebrates (B13)	Drift Deposits (B3) (Riverine)
Water Marks (B1) (Nonriverine)	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Sediment Deposits (B2) (Nonriverine)	Oxidized Rhizospheres along Living Roots ((C3) Dry-Season Water Table (C2)
Drift Deposits (B3) (Nonriverine)	Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Surface Soil Cracks (B6)	Recent Iron Reduction in Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9)
Inundation Visible on Aerial Imagery (B7)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Other (Explain in Remarks)	FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes No X	Depth (inches):	
Water Table Present? Yes <u>No X</u>	Depth (inches):	
Saturation Present? Yes No X	Depth (inches): Wetla	nd Hydrology Present? Yes <u>No X</u>
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring wel	II, aerial photos, previous inspections), if ava	ailable:
Remarks: Ditch old with no signs of recent hydrology		
Telliarts. Diter ou, with no signs of recent hydrology.		

Project/Site:	Green Business Park Loomis		City/County: L	oomis, Pla	cer Cou	nty	Sampling Da	ate:	10/18/18	
Applicant/Owner:	Mima Capita	I, LLC.					State: CA	Sampling Po	oint: DP9	
Investigator(s):	Matt Shaffer			Section,	Township,	Range:	State: S8, T11N, F	R7E		
Landform (hillslop	e, terrace, et	c.): <u>terrace</u>		Local relie	f (concave	, conve	k, none): <u>concave</u>		Slope (%):	5
Subregion (LRR):	Mediterrane	an California (LRR C)	Lat:		38.81	224482	Long:	-121.2189858	Datum:	NAD 83
Soil Map Unit Nan	ne: <u>(</u> 194)	Xerofluvents, frequently	flooded				NWI Classification:	None		
Are climatic / hydr	ologic conditi	ons on the site typical for	this time of	year?	Yes	Х	No	_(If no, explain i	in Remarks.)	
Are Vegetation	, Soil	, or Hydrology		significantly di	sturbed?	Are "	Normal Circumstand	es" present?	Yes X	No
Are Vegetation	, Soil	, or Hydrology		naturally probl	ematic?	(If nee	eded, explain any an	swers in Rema	rks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	X X X	No No No	Is the Sampled Area within a Wetland?	Yes _	x	No	
Remarks: Point taken within Antelop	e Creek.	Exten	sive rip	n corridor present				

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size:) 1.	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
2				Total Number of Dominant Species Across All Strata: 2 (B)
4	0	=Total Cover		Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)
Sapling/Shrub Stratum (Plot size:)				Prevalence Index Worksheet:
1. Salix gooddingii	T		FACW	Total % Cover of: Multiply by:
2				OBL species 0 x1 = 0
3.				FACW species 32 x2 = 64
4				FAC species 13 x3 = 39
5.				FACU species 25 x4 = 100
	0	=Total Cover		UPL species 0 x5 = 0
Herb Stratum (Plot size:1 meter ²)		-		Column Totals: 70 (A) 203 (B)
1. Rubus armeniacus	5		FAC	Prevalence Index = B/A = 2.9
2. Sorghum halepense	25	Y	FACU	
3. Cyperus eragrostis	7		FACW	Hydrophytic Vegetation Indicators:
4. Persecaria lapathifolia	25	Y	FACW	Dominance Test is >50%
5. Xanthium strumarium	2	·	FAC	X Prevalence Index is $\leq 3.0^1$
6. Phytolacca americana	3	·	FAC	Morphological Adaptationd ¹ (Provide supporting
7. Populus fremontii (saplings)	3	·	FAC	data in Remarks or on a separate sheet)
8.				Problematic Hydrophytic Vegetation ¹ (Explain)
	70	=Total Cove		
<u>Woody Vine Stratum</u> (Plot size:) 1				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2				Hydrophytic
% Bare Ground in Herb Stratum 30*	0 % Cover of	=Total Cover Biotic Crust	r	Vegetation Present? Yes X No
Remarks: *Running water within creek.				

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SOIL

• p	Matrix		Re	edox Features				
nches)	Color (moist)	%	Color (moist)	% Туре	¹ Loc ²	Texture	F	Remarks
vne: C=Co	ncentration D=Depletion	n RM=Rec	luced Matrix_CS=C	Covered or Coated	Sand Grains	2 location: PI = Pore I ining	n M=Matrix	
	Indiantera: (Applicat						motio Hydria	Collo ³
Histos	ol (A1)	ible to all	Sandy	Redox (S5)		1 cm Muck (A9) (I RR C)	5011S :
1 1101000			Canay				v /	
Histic I	Eninedon (A2)		Strinne	d Matrix (S6)		2 cm Muck (A10)	(IRR B)	
Histic I Black I	Epipedon (A2) Histic (A3)		Strippe	d Matrix (S6) Mucky Mineral (F	:1)	2 cm Muck (A10) Reduced Vertic (F	(LRR B) F18)	
Histic I Black I Hydrod	Epipedon (A2) Histic (A3) gen Sulfide (A4)		Strippe Loamy	d Matrix (S6) Mucky Mineral (F Gleved Matrix, (F	·1) ·2)	2 cm Muck (A10) Reduced Vertic (I Red Parent Mate	(LRR B) F18) rial (TF2)	
Histic I Black I Hydrog Stratifi	Epipedon (A2) Histic (A3) gen Sulfide (A4) ed Lavers (A5) (L RR (C)	Strippe Loamy Loamy Deplete	d Matrix (S6) Mucky Mineral (F Gleyed Matrix (F ad Matrix (F3)	71) 72)	2 cm Muck (A10) Reduced Vertic (F Red Parent Mater	(LRR B) F18) rial (TF2) Remarks)	
Histic I Black I Hydrog Stratifi 1 cm N	Epipedon (A2) Histic (A3) gen Sulfide (A4) ed Layers (A5) (LRR (/uck (A9) (LRR D)	C)	Strippe Loamy Loamy Deplete Redox	d Matrix (S6) Mucky Mineral (F Gleyed Matrix (F ed Matrix (F3) Dark Surface (F6	71) 72)	2 cm Muck (A10) Reduced Vertic (F Red Parent Mater Other (Explain in	(LRR B) F18) rial (TF2) Remarks)	
Histic I Black I Hydrog Stratifi 1 cm N Deplet	Epipedon (A2) Histic (A3) gen Sulfide (A4) ed Layers (A5) (LRR (/luck (A9) (LRR D) ed Below Dark Surfaci	C) e (A11)	Strippe Loamy Deplete Redox Deplete	d Matrix (S6) Mucky Mineral (F Gleyed Matrix (F ed Matrix (F3) Dark Surface (F6 ed Dark Surface (:1) :2)) F7)	2 cm Muck (A10) Reduced Vertic (f Red Parent Mater Other (Explain in	(LRR B) F18) rial (TF2) Remarks)	
Histic I Black I Hydrog Stratifi 1 cm N Deplet Thick I	Epipedon (A2) Histic (A3) gen Sulfide (A4) ed Layers (A5) (LRR (/luck (A9) (LRR D) ed Below Dark Surface Dark Surface (A12)	C) e (A11)	Strippe Loamy Deplete Redox Redox Redox	d Matrix (S6) Mucky Mineral (F Gleyed Matrix (F ed Matrix (F3) Dark Surface (F6 ed Dark Surface (Depressions (F8)	1) 2)) F7)	2 cm Muck (A10) Reduced Vertic (F Red Parent Mater Other (Explain in	(LRR B) F18) rial (TF2) Remarks)	
Histic I Black I Hydrog Stratifi 1 cm N Deplet Thick I Sandy	Epipedon (A2) Histic (A3) gen Sulfide (A4) ed Layers (A5) (LRR (Muck (A9) (LRR D) ed Below Dark Surface Dark Surface (A12) Mucky Mineral (S1)	C) e (A11)	Strippe Loamy Deplete Redox Deplete Redox Redox Vernal	d Matrix (S6) Mucky Mineral (F Gleyed Matrix (F ed Matrix (F3) Dark Surface (F6 ed Dark Surface (Depressions (F8) Pools (F9)	(1) (2)) F7)	2 cm Muck (A10) Reduced Vertic (F Red Parent Mater Other (Explain in ³ Indicators of	(LRR B) F18) rial (TF2) Remarks) f hydrophytic v	regetation and
Histic I Black I Hydrog Stratifi 1 cm M Deplet Thick I Sandy Sandy	Epipedon (A2) Histic (A3) gen Sulfide (A4) ed Layers (A5) (LRR (Muck (A9) (LRR D) ed Below Dark Surface Dark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4)	C) e (A11)	Strippe Loamy Deplete Redox Redox Redox Vernal	d Matrix (S6) Mucky Mineral (F Gleyed Matrix (F d Matrix (F3) Dark Surface (F6 d Dark Surface (Depressions (F8) Pools (F9)	71) (2)) F7)	2 cm Muck (A10) Reduced Vertic (F Red Parent Mater Other (Explain in ³ Indicators of wetland hy unless di	(LRR B) F18) rial (TF2) Remarks) f hydrophytic v /drology must isturbed or pro	regetation and be present, oblematic.
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Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; ch	eck all that apply)	Secondary Indicators (2 or more required)
X Surface Water (A1)	Salt Crust (B11)	Water Marks (B1) (Riverine)
X High Water Table (A2)	Biotic Crust (B12)	X Sediment Deposits (B2) (Riverine)
X Saturation (A3)	X Aquatic Invertebrates (B13)	X Drift Deposits (B3) (Riverine)
Water Marks (B1) (Nonriverine)	Hydrogen Sulfide Odor (C1)	X Drainage Patterns (B10)
Sediment Deposits (B2) (Nonriverine)	Oxidized Rhizospheres along Living Roots (C3)	Dry-Season Water Table (C2)
Drift Deposits (B3) (Nonriverine)	Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Surface Soil Cracks (B6)	Saturation Visible on Aerial Imagery (C9)	
X Inundation Visible on Aerial Imagery (B7)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
X Water-Stained Leaves (B9)	Other (Explain in Remarks)	FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes X No	Depth (inches): <u>~30</u>	
Water Table Present? Yes X No	Depth (inches): 0	
Saturation Present? Yes X No	Depth (inches): 0 Wetland H	lydrology Present? Yes X No
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitorir	ng well, aerial photos, previous inspections), if availabl	le:
Remarks: Perennial water flow from north to south		

Aquatic Resources Delineation Map



Notes: Map Scale: 1 inch = 200 feet Coordinate System: NAD 1983 State Plane California II Datum: NAD83 Projection: Lambert Conformal Conic Vertical Data: NAVD88 Aerial Base: USDA, National Agriculture Imagery Progra6 Aerial Base Flown: 30 June 2016 Topographic Contours: Placer County Date Map Prepared: 30 November 2018 Map Prepared by: N. Bente Delineation Performed by: D. Bown, M. Shaffer

Definitions:

NAD = North American Datum NAVD = North American Vertical Datum USDA = United States Department of Agriculture

50 100 200

Prepared For:

Building Engineering & Management, Inc. c/o Evan Mackenzie 4780 Rocklin Road Rocklin, California 95677

Aquatic Resources (0.857 acre) Wetlands

- Seasonal Wetland Swale (0.288 acre) **Other Waters**
- Antelope Creek (0.156 acre)
- Pond (0.404 acre) Roadside Ditch (0.009 acre)



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Other Features Study Area Boundary (98 acres) Reference Point • Data Point Ground Surface Elevation, 5 foot contour interval

Aquatic Resources Delineation Green Business Park Loomis Loomis, Placer County, California



Plant Species Observed within the Study Area

Plant Species Observed within the Green Business Park Loomis Study Area 16, 17, 18 October; 21, 28 November 2018

		Wetland Indicator
Species Name	Common Name	Status
Aesculus californica	California buckeye	UPL
Ailanthus altissima	Tree of heaven	FACU
Avena fatua	Wild oat	UPL
Baccharis pilularis	Coyote brush	UPL
Brassica nigra	Black mustard	UPL
Bromus diandrus	Ripgut brome	UPL
Bromus hordeaceus	Soft chess	FACU
Carduus pycnocephalus	Italian thistle	UPL
Centaurea solstitialis	Yellow star-thistle	UPL
Centromadia fitchii	Fitch's spikeweed	FACU
Chondrilla juncea	Skeleton weed	UPL
Cirsium vulgare	Bull thistle	FACU
Convolvulus arvensis	Field bindweed	UPL
Croton setiger	Turkey mullein	UPL
Crypsis schoenoides	Swamp grass	FACW
Cupressus sempervirens	Mediterranean cypress	UPL
Cynodon dactylon	Bermuda grass	FACU
Cynosurus echinatus	Hedgehog grass	UPL
Cyperus eragrostis	Tall flatsedge	FACW
Diospyros virginiana	Common persimmon	FAC
Dittrichia graveolens	Stinkwort	UPL
Elymus caput-medusae	Medusa head	UPL
Epilobium brachycarpum	Panicled willowherb	FAC
Epilobium ciliatum	Fringed willowherb	FACW
Erodium botrys	Filaree	FACU
Eschscholzia californica	California poppy	UPL
Festuca arundinacea	Tall fescue	FACU
Festuca perennis	Perennial ryegrass	FAC
Fraxinus latifolia	Oregon ash	FACW
Fraxinus pennsylvanica	Green ash	FACW
Galium aparine	Sticky willy	FACU
Geranium dissectum	Cut-leaf geranium	UPL
Hordeum murinum	Wall barley	FACU
Hypochaeris glabra	Smooth cat's ear	UPL
Hypochaeris radicata	Rough cat's ear	FACU
Juglans sp.	Walnut	-
Juniperus sp.	Juniper	FACU
Lactuca serriola	Prickly lettuce	FACU
Leontodon saxatilis	Hairy hawkbit	FACU

Ludwigia peploides	Floating primrose willow	OBL
Lythrum hyssopifolia	Hyssop loosestrife	OBL
Madia elegans	Common madia	UPL
Mentha pulegium	Pennyroyal	OBL
Nicotiana acuminata	Manyflower tobacco	UPL
Olea europaea	Olive	UPL
Persicaria lapathifolia	Common knotweed	FACW
Phoenix canariensis	Canary island date palm	UPL
Phytolacca americana	Poke weed	FAC
Pinus sabiniana	Grey pine	UPL
Plantago lanceolata	English plantain	FAC
Plantago major	Common plantain	FAC
Platanus racemosa	California sycamore	FAC
Polygonum aviculare	Prostrate knotweed	FAC
Polypogon monspeliensis	Rabbitsfoot grass	FACW
Populus alba	White poplar	-
Populus fremontii	Fremont cottonwood	FAC
Portulaca oleracea	Common purslane	FAC
Proboscidea louisianica	Common devil's claw	FACU
Punica granatum	Pomegranate	UPL
Pyrus calleryana	Callery pear	UPL
Quercus douglasii	Blue oak	UPL
Quercus lobata	Valley oak	FACU
Quercus wislizeni	Interior live oak	UPL
Ranunculus bonariensis	Carter's buttercup	OBL
Robinia pseudoacaria	Black locust	FACU
Rubus armeniacus	Himalayan blackberry	FAC
Rumex crispus	Curly dock	FAC
Salix exigua	Sandbar willow	FACW
Salix gooddingii	Goodding's black willow	FACW
Salix lasiolepis	Arroyo willow	FACW
Sambucus nigra	Black elderberry	FACU
Sorghum halepense	Johnson grass	FACU
Toxicodendron diversilobum	Poison oak	FACU
Trifolium hirtum	Rose clover	UPL
Trifolium subterraneum	Subterranean clover	UPL
Typha sp.	Cattail	OBL
Verbascum blattaria	Moth mullein	UPL
Verbascum thapsus	Woolly mullein	FACU
Xanthium strumarium	Rough cocklebur	FAC

Attachment D

Representative Site Photographs



Data Point DP-1 – 17 October 2018



Data Point DP-2 – 17 October 2018



Data Point DP-3 (within SWS-1) - 17 October 2018



Data Point DP-4 – 17 October 2018



Data point DP-5 (within P-2) – 17 October 2018



Data point DP-6 – 17 October 2018



Data point DP-7 (within SWS-5) – 18 October 2018



Data point DP-8 - 18 October 2018



Data point DP-9 (within Creek-11) – 18 October 2018



Ungrazed parcel, facing west – 16 October 2018



Grazed pastureland, facing east – 16 October 2018



Riparian corridor along Antelope Creek, facing northwest – 16 October 2018



Remnant orchard, facing southeast – 18 October 2018



Oak savanna, facing northwest – 18 October 2018



Seasonal wetland swale (SWS-6), facing southwest – 17 October 2018



Pond (P-4), facing west - 18 October 2018



Antelope Creek (Creek-11), facing northeast – 18 October 2018



Roadside Ditch (RD-1), facing southwest – 21 November 2018

GIS Shapefiles and the Aquatic Resources Excel Spreadsheet (on CD)