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*A Company of Specialists*

November 3, 2010

Ms. Karen D. Wilson  
San Diego Gas & Electric  
8315 Century Park Court, CP21G  
San Diego, CA 92123-1548

Reference: Rare Plant and Invasive Weed Report for the Rough Acres Construction Yard of the San Diego Gas & Electric Sunrise Powerlink Project (RECON Number 5091-1)

Dear Ms. Wilson:

This letter describes the results of RECON's rare plant survey conducted on the Rough Acres Construction Yard in Boulevard, California, for the proposed Environmentally Superior Southern Route (ESSR) of the San Diego Gas & Electric (SDG&E) Sunrise Powerlink Project (Project).

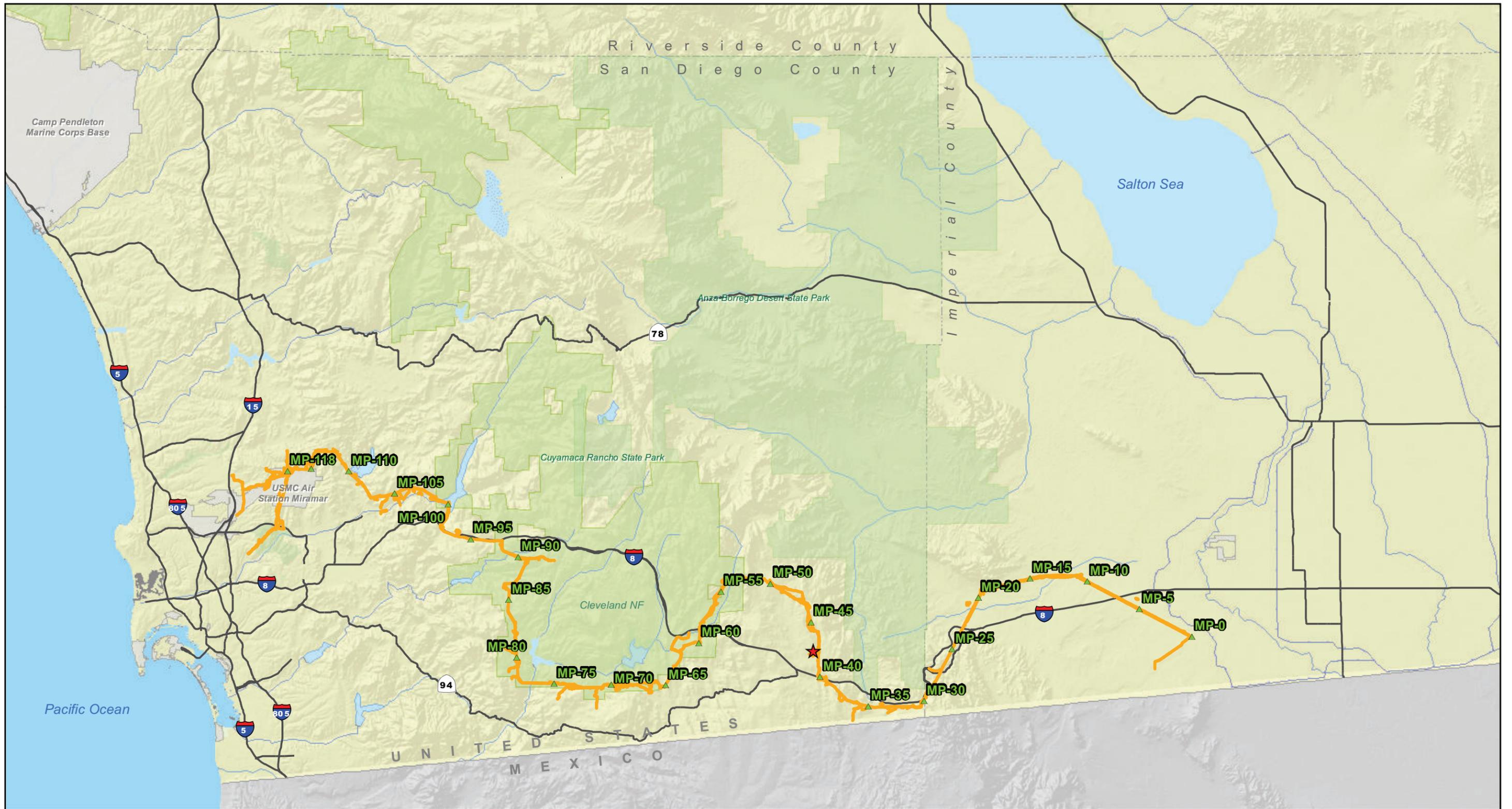
SDG&E proposes to construct a new electric transmission line between the existing Imperial Valley and Sycamore Canyon Substations, a proposed new substation (Suncrest Substation), and other system modifications and upgrades in order to reliably operate the new line. The entire Project would traverse approximately 120 miles between the El Centro area of Imperial County and southwestern San Diego County in southern California (Figure 1).

The focus of this report is the Rough Acres Construction Yard, which will be used for material storage and staging to support the Project area (Figure 2). The Rough Acres Construction Yard is found in Boulevard, California, north of Interstate 8, off McCain Valley Road. The Project alignment is adjacent to the Rough Acres Construction Yard east of McCain Valley Road.

## **METHODS**

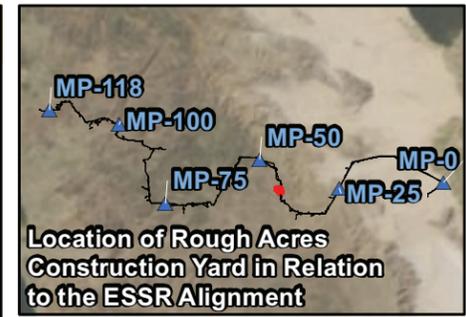
On May 19 and 20, 2010, Gonzales Consulting biologist Teresa Gonzales visited the Rough Acres Construction Yard in Boulevard, California, and conducted rare plant surveys and invasive weed surveys in accordance with the Project Environmental Impact Report. On October 31, 2010, RECON biologist Michael Nieto conducted a verification survey at the site (Table 1). Information on potential sensitive plant species' habitat preferences, soil types, and phenology was compiled and used to guide survey efforts. Soil types within the study area were identified based on the reports and maps in the Soil Surveys for the San Diego and Imperial County areas (U.S. Department of Agriculture 1973, 1981).

A survey buffer of 30 feet outside of project boundaries was surveyed in order to record rare plant and invasive weed populations adjacent to the proposed yard.



- ★ Rough Acres Construction Yard
- Project Alignment (ROW, Temporary and Permanent Impact Areas)
- ▲ Mileposts

FIGURE 1  
Regional Location



- Location of Rough Acres Construction Yard in Relation to the ESSR Alignment
- Project Alignment (ROW, Temporary and Permanent Impact Areas)
  - Rough Acres Construction Yard
  - Mileposts - 2010

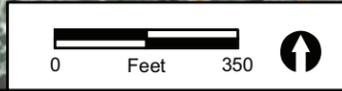


FIGURE 2  
Aerial Photograph of the  
Rough Acres Construction Yard

**TABLE 1**  
**PERSONNEL AND DATES OF SENSITIVE SPECIES SURVEYS**

Date	Biologists
5/19/2010	Teresa and Paul Gonzales (GCS)
5/20/2010	Teresa and Paul Gonzales (GCS)
10/31/2010	Michael Nieto (RECON)

The survey area was traversed on foot, with biologists walking meandering transects within the construction yard, spending the majority of time in areas with intact native soil and vegetation and areas with high densities of invasive weeds. Potential and observed sensitive plant populations are described in Attachment A.

Surveyors recorded the location of all target sensitive plant species when encountered using Trimble GeoXT or handheld units. Any additional information pertaining to global positioning system (GPS) points were recorded into each surveyor's field notebook. Survey data was downloaded from the GPS units into a geographic information system (GIS) database. Following the last survey, the GIS database was updated and refined with the information contained in each surveyor's field notes.

Prior to the survey effort, a thorough literature review was performed. Identification of species was confirmed through species lists and recognized taxonomic keys (Hickman 1993; Baldwin et al. 2002; Rebman 2006, 2008a, 2008b, 2010, 2010b). Determination of the potential occurrence for listed, sensitive, or noteworthy species is based upon known ranges and habitat preferences for the species (State of California 2010, 2010b; California Native Plant Society [CNPS] 2001, 2010; Reiser 2001), species occurrence records from the California Natural Diversity Database (CNDDB) (State of California 2010) and the All Species Occurrences Database (U.S. Fish and Wildlife Service 2009), and species occurrence records from other sites in the vicinity of the survey area. Vegetation communities, when characterized, are consistent with those described in the final Environmental Impact Report/Environmental Impact Statement (California Public Utilities Commission and U.S. Department of the Interior, Bureau of Land Management 2008), which parallels Holland (1986) as modified by Oberbauer (1996).

For purposes of this report, species are considered to be sensitive if they are: (1) listed by state or federal agencies as threatened or endangered or are proposed for listing; (2) on List 1B (considered endangered throughout its range) or List 2 (considered endangered in California but more common elsewhere) of the CNPS *Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2001, 2010); or (3) considered rare, endangered, or threatened by the CNDDB (State of California 2009a) or local conservation organizations or specialists. Impacts to CNPS List 1B and 2 species, due to their relatively high regional sensitivity, will require in-kind mitigation.

Invasive weeds for this survey were defined by the Environmental Impact Report/Environmental Impact Statement as follows: (1) species within the project area that promote the spread of wildfires such as cheatgrass (*Bromus tectorum*), Saharan mustard (*Brassica tournefortii*), and medusa head (*Taeniatherum caput-medusae*) (CPUC/BLM 2008 and USFWS 2009); (2) species within the project that the County of San Diego has identified as "targeted noxious weeds" (County of San Diego 2010); and (3) species categorized by the California Invasive Plant Council (Cal-IPC) Invasive Plant Inventory as High or Moderate for negative ecological impact (Cal-IPC 2006). Pre-construction surveys were conducted in accordance with the *Weed Control Plan for the Environmentally Superior Southern Route of the SDG&E Sunrise Powerlink Project*, hereafter "Weed Control Plan" (RECON 2010). Each exotic species population located within the project area was categorized into one of four density classes. Density categorization was based on qualitatively derived cover estimates of the population. The density categories assigned are presented in Table 2.

**TABLE 2  
EXOTIC SPECIES DENSITY CATEGORIES**

Category	Description	Density
T	Trace	Individual(s), less than 1 %
Class 1	Low	1 to 25 % Cover
Class 2	Medium	26 to 50 % Cover
Class 3	Dense	51 to 100 % Cover

**SENSITIVE PLANT RESOURCES AND PROJECT IMPACTS**

A list of rare plant species identified during the survey is presented in Table 3. Jacumba milk-vetch (*Astragalus douglasii* var. *perstrictus*) is generally found in areas of mild disturbance and was distributed throughout the proposed construction site. Sticky geraea (*Geraea viscida*) was also observed in sandy, mildly disturbed areas within the proposed yard, but at much smaller densities (Figure 3). Construction activities at the site will attempt to avoid mapped rare plant populations. As the intensity of potential impacts within the yard will be significant and rare plants are distributed throughout the yard, avoidance will not always be possible. In cases where the two species of identified rare plants cannot be avoided, a plant salvage and reseeding program has been developed.

**TABLE 3  
RARE PLANT SPECIES OBSERVED**

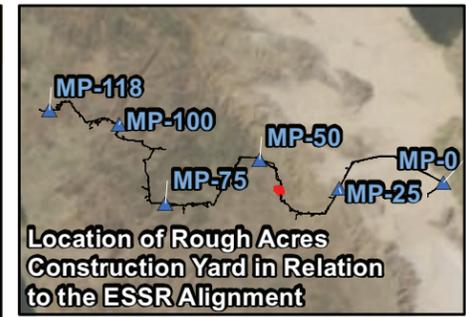
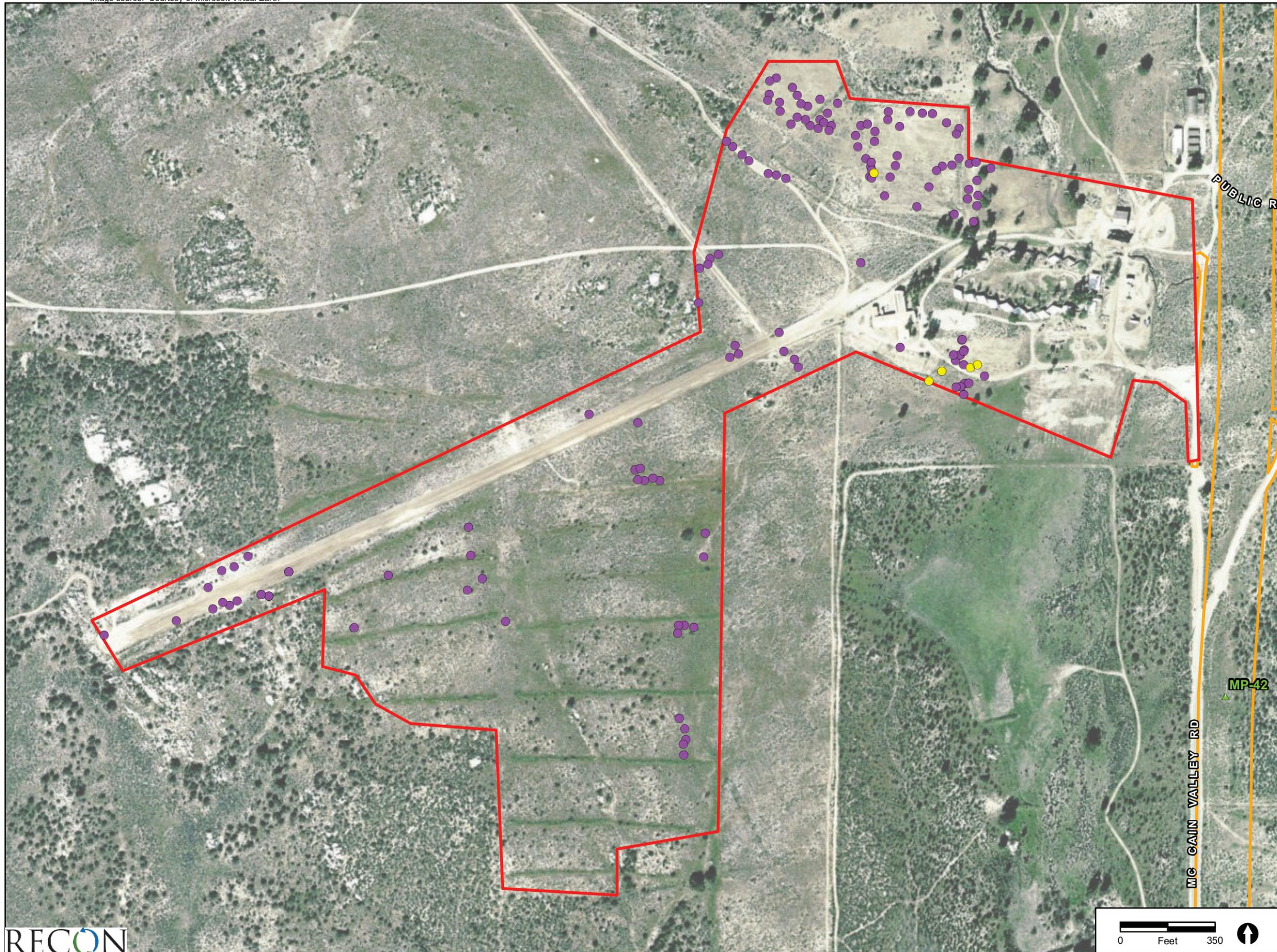
Scientific Name	Common Name	CNPS Rating	Number Observed
<i>Astragalus douglasii</i> var. <i>perstrictus</i>	Jacumba milk-vetch	1B.2	806
<i>Geraea viscida</i>	sticky geraea	2.3	20

**INVASIVE PLANTS**

A list of invasive weed species identified during the survey is presented in Table 4. Invasive weeds were observed throughout the proposed construction yard (Figure 4a-4e). Two species identified in the EIR/EIS as wildfire promoting species, Saharan mustard (*Brassica tournefortii*) and cheatgrass (*Bromus tectorum*) were identified within the proposed construction yard. A small grove (three individuals) of saltcedar (*Tamarix ramosissima*), a tree-like invasive weed, was also observed at a single location in the yard. In accordance with the Weed Control Plan, invasive weeds detected this season will be treated prior to project construction (RECON 2010).

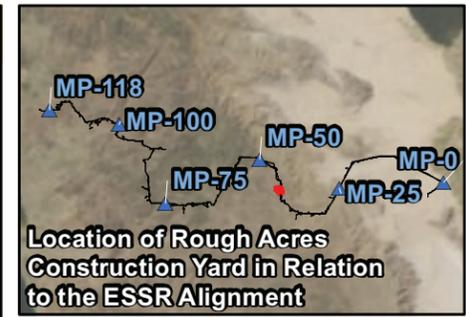
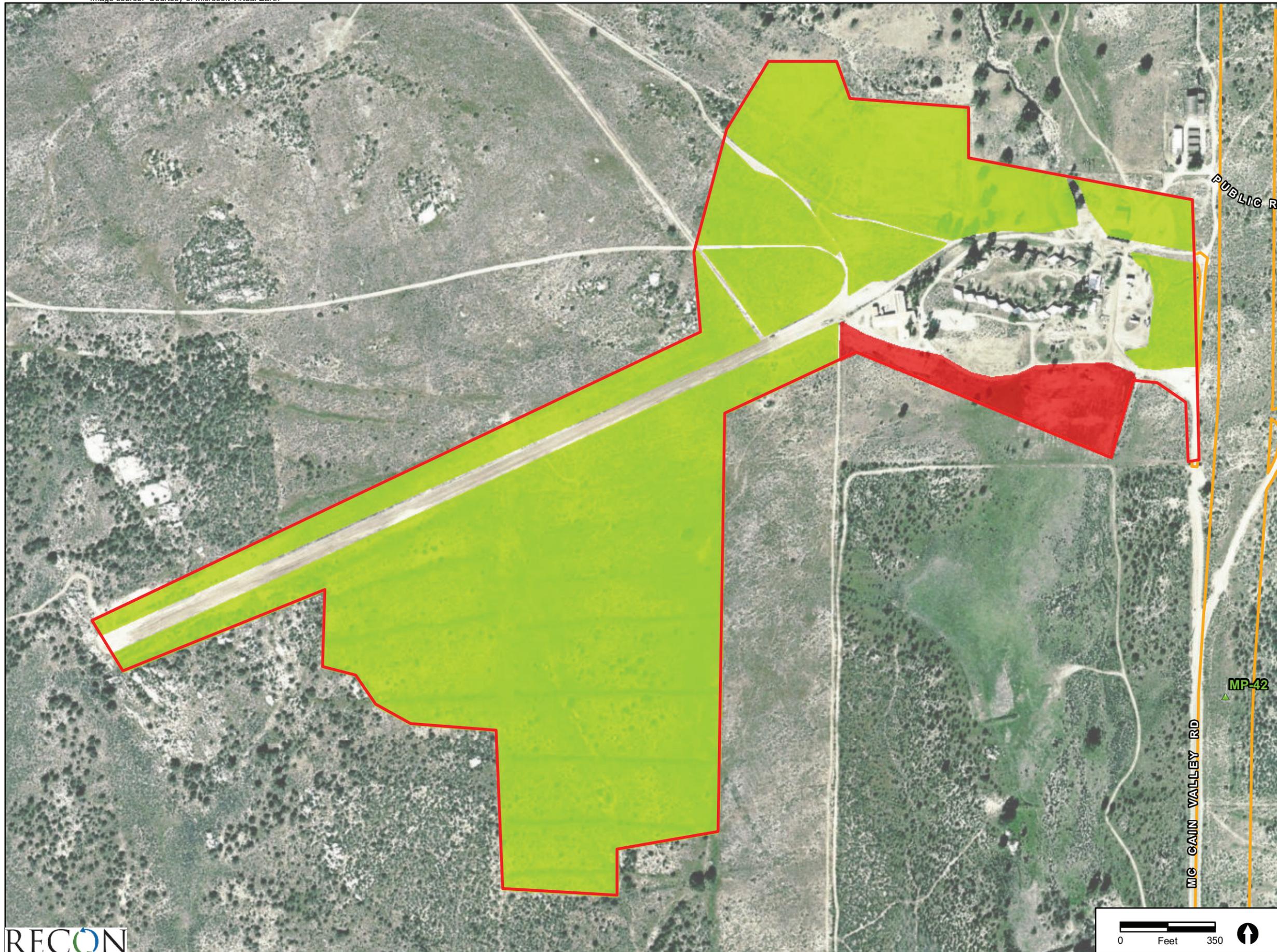
**TABLE 4  
INVASIVE WEED SPECIES OBSERVED**

Scientific Name	Common Name	Cal-IPC Rating	Wildfire Promoter	San Diego County Noxious Weed	Density
<i>Brassica tournefortii</i>	Saharan mustard	High	Yes	No	Low
<i>Bromus madritensis</i> ssp. <i>rubens</i>	foxtail chess	High	No	No	Medium
<i>Bromus tectorum</i>	cheatgrass	High	Yes	No	Medium
<i>Hirschfeldia incana</i>	shortpod mustard	Moderate	No	No	Low
<i>Tamarix ramosissima</i>	saltceder	High	No	No	3 individ..



- Location of Rough Acres Construction Yard in Relation to the ESSR Alignment**
- Project Alignment (ROW, Temporary and Permanent Impact Areas)
  - Rough Acres Construction Yard
  - Mileposts - 2010
- Sensitive Plants 2010**
- Jacumba Milk Vetch (*Astragalus douglasii* var. *perstric*)
  - Sticky Geranium (*Geraea viscida*)

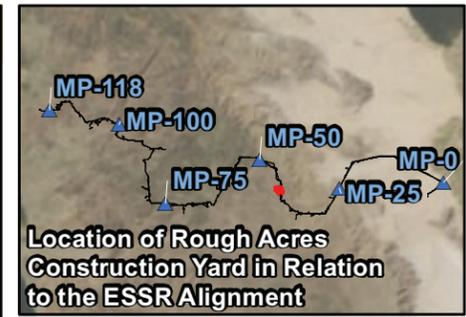
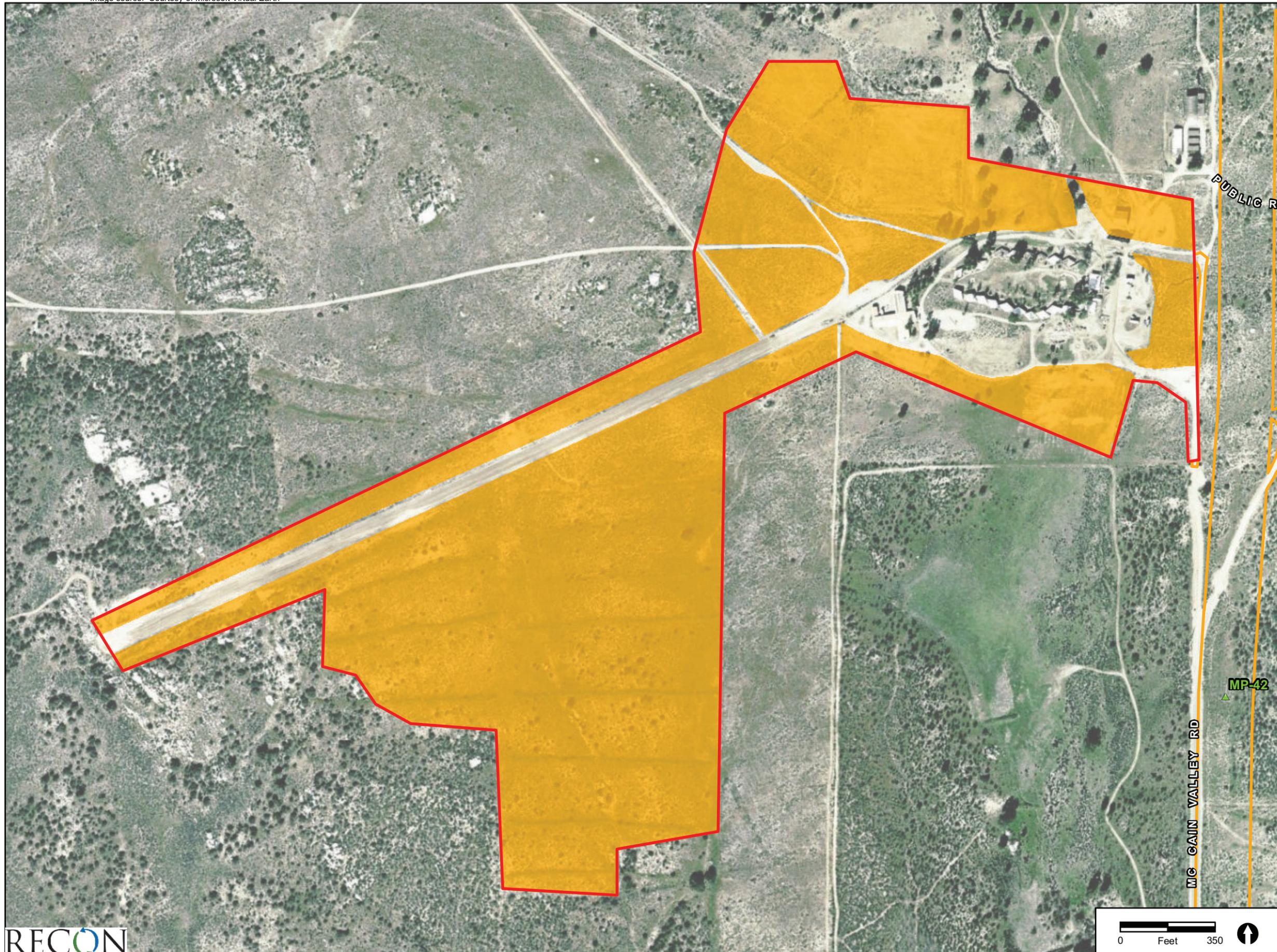
FIGURE 3  
Rough Acres Construction Yard  
Sensitive Plant Survey Results



- Project Alignment (ROW, Temporary and Permanent Impact Areas)
- Rough Acres Construction Yard
- ▲ Mileposts - 2010
- Saharan Mustard (*Brassica tournefortii*)**
- Low
- Dense

FIGURE 4a

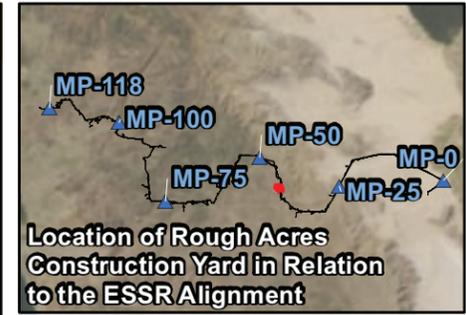
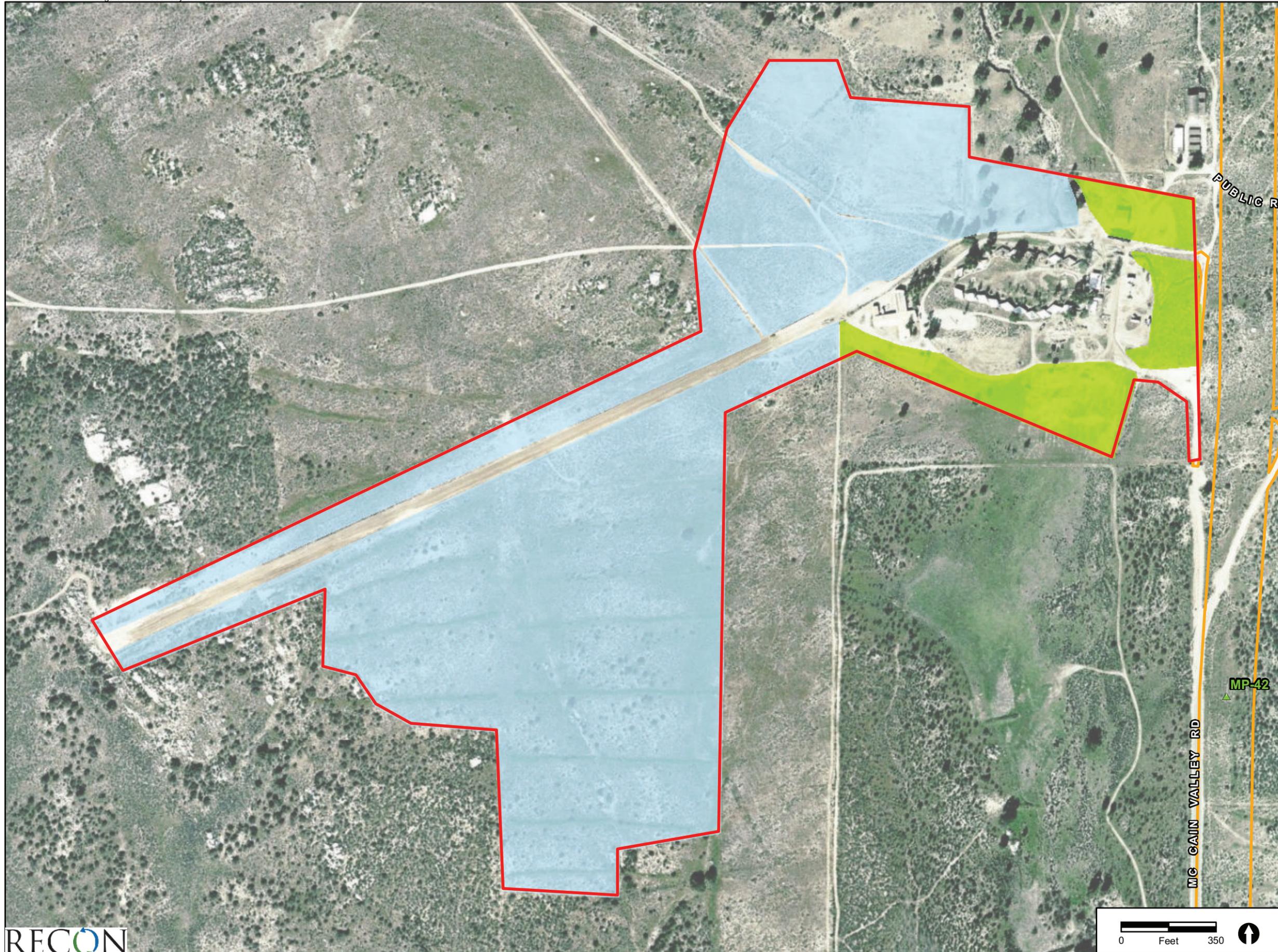
Rough Acres Construction Yard Invasive Species Survey Results



-  Project Alignment (ROW, Temporary and Permanent Impact Areas)
-  Rough Acres Construction Yard
-  Mileposts - 2010
- Foxtail Chess (*Bromus madritensis*)**
-  Med

FIGURE 4b

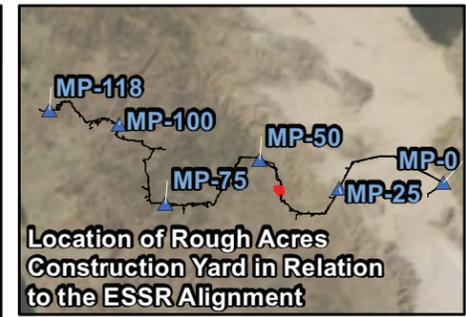
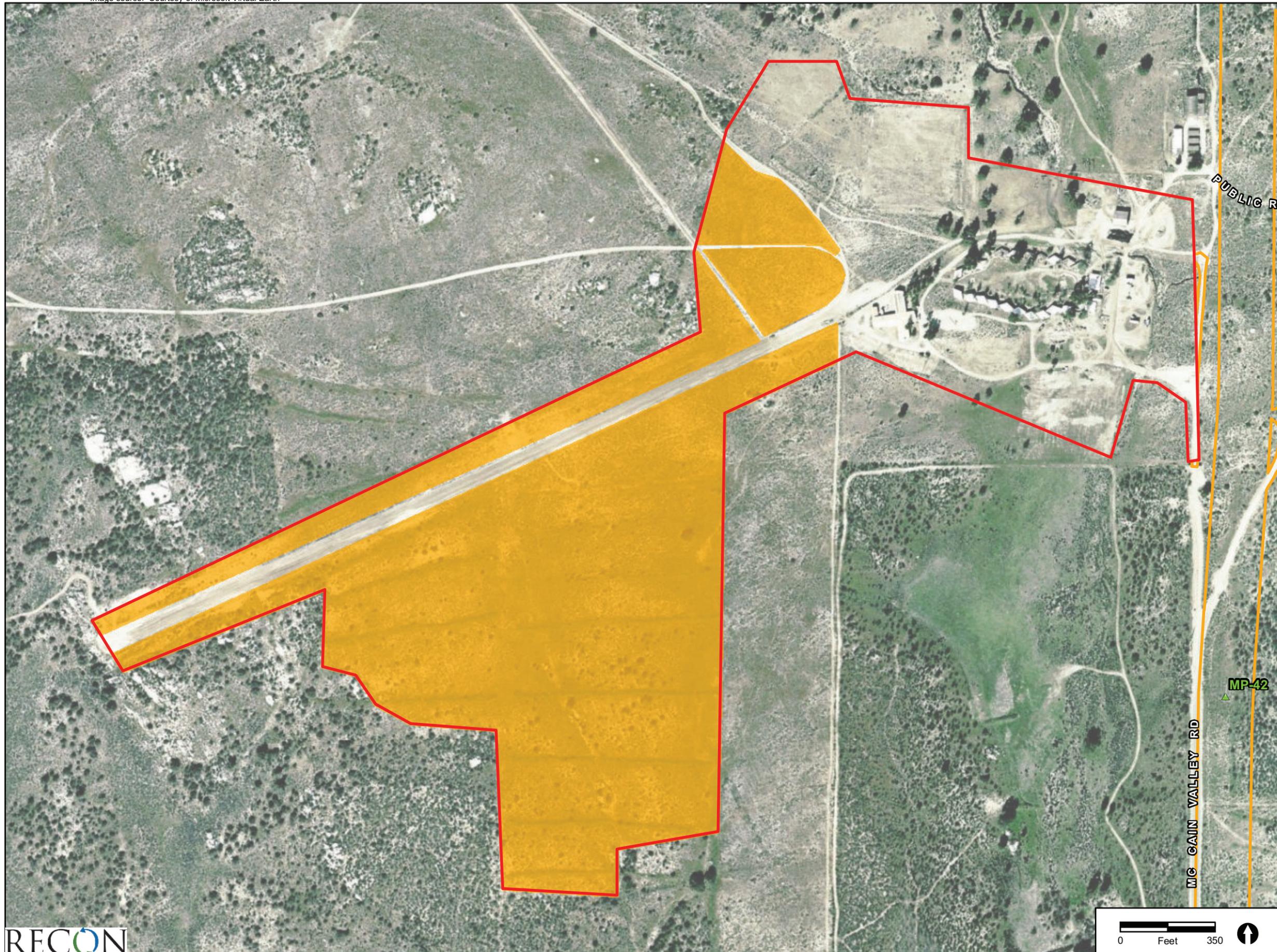
Rough Acres Construction Yard Invasive Species Survey Results



- Project Alignment (ROW, Temporary and Permanent Impact Areas)
- Rough Acres Construction Yard
- ▲ Mileposts - 2010
- Shortpod Mustard (*Hirschfeldia incana*)**
- Trace
- Low

FIGURE 4c

Rough Acres Construction Yard Invasive Species Survey Results



- Project Alignment (ROW, Temporary and Permanent Impact Areas)
- Rough Acres Construction Yard
- ▲ Mileposts - 2010
- Cheatgrass (*Bromus tectorum*)**
- Medium

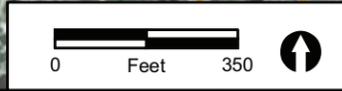
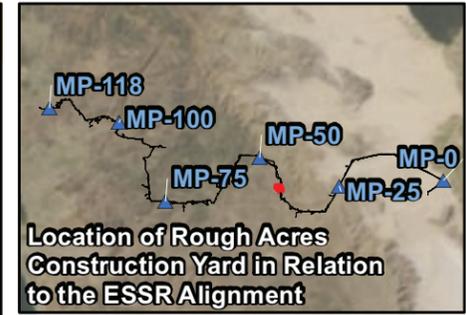
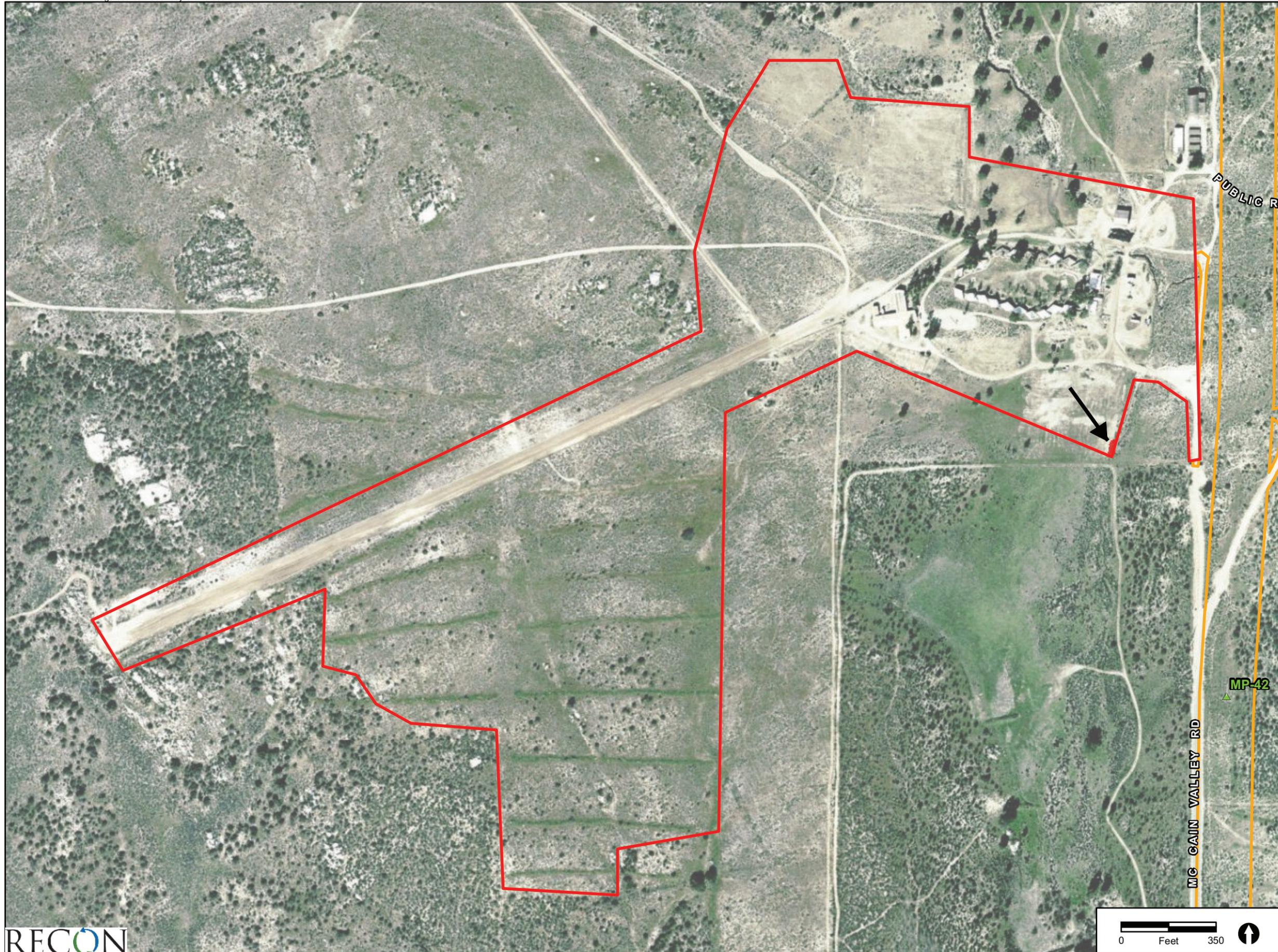


FIGURE 4d

Rough Acres Construction Yard Invasive Species Survey Results



- Project Alignment (ROW, Temporary and Permanent Impact Areas)
- Rough Acres Construction Yard
- ▲ Mileposts - 2010
- Saltcedar (*Tamarix ramosissima*)**
- 3 Individuals



FIGURE 4e

Rough Acres Construction Yard Invasive Species Survey Results

Ms. Karen D. Wilson  
Page 2  
November 3, 2010

If you have any questions, please do not hesitate to contact me.

Sincerely,



Michael Nieto  
Biologist

MJN:sjg

Attachment

### References Cited

- Baldwin, B. G., S. Boyd, B. J. Ertter, R. W. Patterson, T. J. Rosatti, and D. H. Wilken  
2002 *The Jepson Desert Manual*. University of California Press, Berkeley and Los Angeles
- California Invasive Plant Council (Cal-IPC)  
2006 California Invasive Plant Inventory. <http://www.cal-ipc.org/ip/inventory/pdf/Inventory2006.pdf>. February.
- California, State of  
2010a State and Federally Listed Endangered, Threatened, and Rare Plants of California. Natural Diversity Database. Biogeographic Data Branch, Department of Fish and Game. Quarterly publication, July.
- 2010b Special Vascular Plants, Bryophytes, and Lichens List. Biogeographic Data Branch, Department of Fish and Game. Quarterly publication, July.
- California Native Plant Society (CNPS)  
2001 *Inventory of Rare and Endangered Plants of California*. 6th ed. Rare Plant Scientific Advisory Committee, D. P. Tibor, convening editor.
- 2010 *Inventory of Rare and Endangered Plants* [online, v7-10c]. Accessed March. Available from <<http://www.cnps.org/inventory/>>.
- California Public Utilities Commission and U.S. Department of the Interior, Bureau of Land Management  
2008 Final Environmental Impact Report/Environmental Impact Statement and Proposed Land Use Amendment, San Diego Gas & Electric Company Application for the Sunrise Powerlink Project. SCH #2006091071, DOI Control No. FES-08-54. October.
- Hickman, J. C., ed.  
1993 *The Jepson Manual: Higher Plants of California*. University of California Press, Berkeley and Los Angeles.
- Holland, R. F.  
1986 Preliminary Descriptions of the Terrestrial Natural Communities of California. Nongame-Heritage Program, California Department of Fish and Game, Sacramento. October.
- Munz, P. A.  
1974 *A Flora of Southern California*. University of California Press, Berkeley.

Oberbauer, T.

- 1996 Terrestrial Vegetation Communities in San Diego County Based on Holland's Descriptions. Unpublished list.

Rebman, J. P., and M. G. Simpson

- 2006 *Checklist of the Vascular Plants of San Diego County*. 4th ed. San Diego Natural History Museum.
- 2008 Changes to the Checklist of the Vascular Plants of San Diego County. 4th ed. San Diego Natural History Museum. Accessed 2009. Available from <[http://www.sdnhm.org/research/botany/lists/ChecklistChangesDec08\\_2.pdf](http://www.sdnhm.org/research/botany/lists/ChecklistChangesDec08_2.pdf)>.
- 2008b Additions to the Checklist of the Vascular Plants of San Diego County. 4th ed. San Diego Natural History Museum. Accessed 2009. Available from <<http://www.sdnhm.org/research/botany/lists/ChecklistAdditionsDec08.pdf>>.
- 2010 Changes to the Checklist of the Vascular Plants of San Diego County. 4th ed. San Diego Natural History Museum. Accessed 2010. Available from <<http://www.sdnhm.org/research/botany/lists/ChangesJan2010.pdf>>.
- 2010b Additions to the Checklist of the Vascular Plants of San Diego County. 4th ed. San Diego Natural History Museum. Accessed 2010. Available from <<http://www.sdnhm.org/research/botany/lists/ChecklistAdditionsJan2010.pdf>>.

RECON

- 2010 Weed Control Plan for the Environmentally Superior Southern Route of the SDG&E Sunrise Powerlink Project, San Diego, California. August 12, 2010.

Reiser, C. H.

- 2001 *Rare Plants of San Diego County*. Aquifer Press, Imperial Beach, CA.

San Diego, County of

- 2010 San Diego Weed Management Area. [http://sdcounty.ca.gov/awm/ipm\\_sdwma.html](http://sdcounty.ca.gov/awm/ipm_sdwma.html). Accessed 2010

U.S. Department of Agriculture

- 1973 *Soil Survey, San Diego Area, California*. Edited by Roy H. Bowman. Soil Conservation Service and Forest Service. December.
- 1981 *Soil Survey of Imperial County, California, Imperial Valley Area*. Soil Conservation Service in cooperation with the University of California Agricultural Experiment Station and Imperial Irrigation District. October.

U.S. Fish and Wildlife Service

- 2009 All Species Occurrences Database.

**ATTACHMENT A**  
**SENSITIVE PLANT SPECIES (CNPS 1B or 2, USFS Sensitive)**  
**OBSERVED OR WITH THE POTENTIAL FOR OCCURRENCE**

Species	State/Federal Status	CNPS List	Other Status	Habitat/Blooming Period	Comments
<b>ANGIOSPERMS: DICOTS</b>					
<b>ASTERACEAE</b>	<b>SUNFLOWER FAMILY</b>				
<i>Deinandra</i> [= <i>Hemizonia</i> ] <i>floribunda</i> Tecate tarplant	-/-	1B.2	USFS	Annual herb; chaparral, sandy drainages; blooms Aug.–Oct.; elevation less than 4,000 feet.	Not observed
<i>Geraea viscida</i> sticky geraea	-/-	2.3	–	Perennial herb; chaparral, mildly disturbed areas; blooms May–June; elevation 1,500–5,600 feet.	Observed growing near an unpaved road in the eastern side of the survey area
<i>Symphotrichum defoliatum</i> San Bernardino aster	-/-	1B.2	–	Rhizomatous herb; Cismontane woodland, meadows and seeps; blooms July–Nov.; 0 - 2,000 feet.	Not observed
<b>BERBERIDACEAE</b>	<b>BARBERRY FAMILY</b>				
<i>Berberis fremontii</i> Fremont barberry	-/-	3	–	Shrub; chaparral, Joshua tree woodland, pinyon and juniper woodland, rocky substrate; blooms April–June; elevation 2,700–6,000 feet.	Not observed
<b>BRASSICACEAE</b>	<b>MUSTARD FAMILY</b>				
<i>Streptanthus campestris</i> southern jewel-flower	-/-	1B.3	USFS	Perennial herb; chaparral, lower montane coniferous forest, pinyon and juniper woodland, rocky areas; blooms May–July; elevation 3,000–7,600 feet.	Not observed
<b>FABACEAE</b>	<b>LEGUME FAMILY</b>				
<i>Astragalus douglasii</i> var. <i>perstrictus</i> Jacumba milk-vetch	-/-	1B.2	USFS	Perennial herb; chaparral, valley and foothill grassland, cismontane woodland; blooms April–June; elevation 3,000–4,500 feet.	Observed growing throughout the survey area
<i>Lupinus excubitus</i> var. <i>medius</i> mountain springs bush lupine	-/-	1B.3	–	Perennial shrub; pinyon and juniper woodland, Sonoran scrub; blooms Mar–May; 400–1,400 feet.	Not observed

**ATTACHMENT A**  
**SENSITIVE PLANT SPECIES (CNPS 1B or 2, USFS Sensitive)**  
**OBSERVED OR WITH THE POTENTIAL FOR OCCURRENCE**  
**(continued)**

Species	State/Federal Status	CNPS List	Other Status	Habitat/Blooming Period	Comments
<b>POLEMONIACEAE</b>					
<b>PHLOX FAMILY</b>					
<i>Linanthus bellus</i> desert beauty	-/-	2.3	-	Annual herb; chaparral on sandy soils; blooms April–May; elevation 3,000–4,500 feet.	Not observed

**FEDERAL CANDIDATES AND LISTED PLANTS**

FE = Federally listed endangered  
 FT = Federally listed threatened  
 FC = Federal candidate for listing as endangered or threatened

**STATE LISTED PLANTS**

CE = State listed endangered  
 CR = State listed rare  
 CT = State listed threatened

**CALIFORNIA NATIVE PLANT SOCIETY LISTS**

1A = Species presumed extinct.  
 1B = Species rare, threatened, or endangered in California and elsewhere. These species are eligible for state listing.  
 2 = Species rare, threatened, or endangered in California but more common elsewhere. These species are eligible for state listing.  
 3 = Species for which more information is needed. Distribution, endangerment, and/or taxonomic information is needed.  
 4 = A watch list of species of limited distribution. These species need to be monitored for changes in the status of their populations.

**OTHER STATUS**

USFS = US Forest Service Forester's List