# DELINEATION OF WATERS OF THE UNITED STATES

# **IONE BAND OF MIWOK INDIANS**

CASINO PROJECT

**JULY 2004** 

Lead Agency:

U.S. Department of the Interior, Bureau of Indian Affairs Pacific Region, 2800 Cottage Way, Room W-2820 Sacramento, CA 95825-1846

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Prepared By:

Analytical Environmental Services 2021 "N" Street, Suite 200 Sacramento, Ca 95814 Phone (916) 447-3479 Fax (916) 447-1665 www.analyticalcorp.com



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**Delineation Data Sheets** 

### **DELINEATION OF WATERS OF THE U.S., 230 ± ACRE IONE CASINO STUDY AREA, AMADOR COUNTY, CALIFORNIA**

#### **JULY 2004**

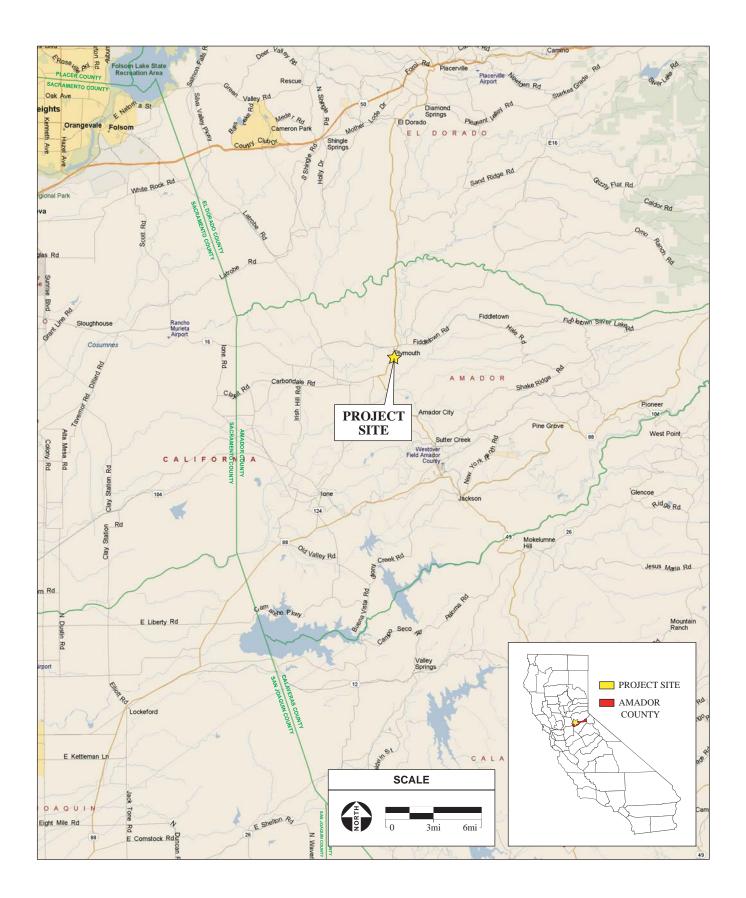
#### **1.0 INTRODUCTION**

Analytical Environmental Services (AES) has conducted a formal delineation of "waters of the U.S." occurring within the 230 ± acre Ione Casino study area. The study area includes 10±-acres of land located within the City of Plymouth, while the remaining acres are located on unincorporated land within Amador County (**Figure 1**). This location is found within portions of Sections 14 and 15 of Township 7 North, Range 10 East, Mount Diablo Baseline and Meridian, on the "Amador City, Calif." U.S. Geological Survey 7.5-minute quadrangle map (**Figure 2**). The project area is shown on an aerial photograph in **Figure 3**.

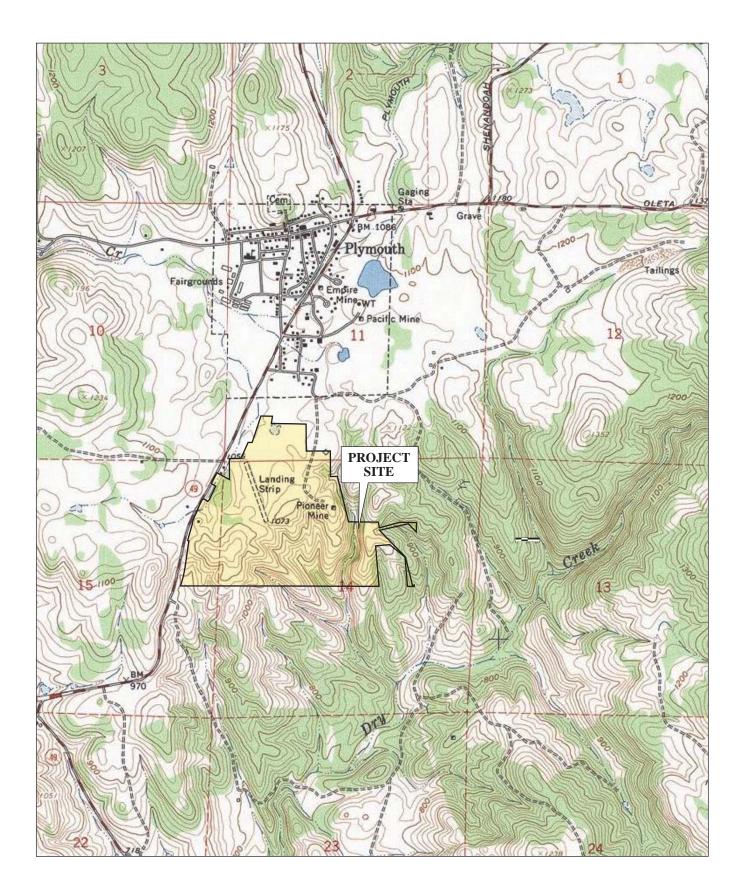
#### 2.0 ENVIRONMENTAL SETTING

Amador County is moderately moist and the average annual temperature is approximately 65 °F, with temperatures ranging from below freezing to over 100°F. The region is in climate Zone 7 – "Great Valley and Surrounding Low Mountains," characterized by marked seasons of hot, dry summers, and moderately cold, wet winters, with most of the precipitation falling during the six months of winter (Sketchley, 1965; Hickman, 1993). Annual precipitation totals 25-30 inches, and the prevailing wind is westerly, averaging less than 10 miles per hour.

The study area is located in the foothills of the western slope of the Sierra Nevada, at an elevation ranging from 900 to 1,150 feet above sea level. The geology of the surrounding area (Amador County) is dominated by steeply dipping, faulted and folded metamorphic rocks that have been intruded by several types of igneous rocks, and overlaying the bedrock in many places are mantles of river gravel and volcanic debris (Sketchley, 1965). The general trend of ridges and rock formations is northwest to southeast, and drainage is generally to southeast. The northern portion of the county lies within the Cosumnes River basin, and the southern portion, including the study area, lies within the Mokelumne River basin. The geology in the project vicinity consists of metasedimentary rocks of the Calaveras Complex such as slate, metamorphosed sandstone, conglomerate, and some limestone and volcanic rock. The sediments that formed these rocks were deposited in an ocean basin during the

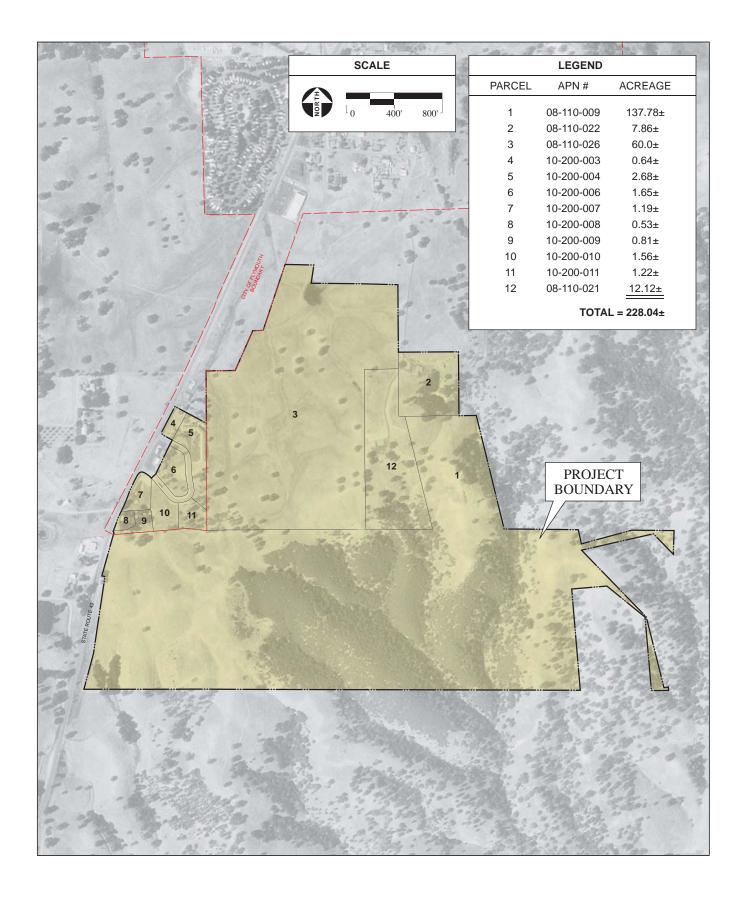


- Ione Band of Miwok Indians Casino Project Waters of the US / 203525



SOURCE: "Amador City, CA" USGS 7.5 Minute Topographic Quadrangle, Sections 11, 14, & 15, T7N, R10E, Mt. Diablo Baseline and Meridian ; AES, 2004 - Ione Band of Miwok Indians Casino Project Waters of the US / 203525 ■

**Figure 2** Site and Vicinity



Upper Paleozoic Period and were then intensely folded, sheared, heated, and fractured by processes that created the Sierra Nevada. The Calaveras Complex is highly fractured and has exposures at the project site in stream bottoms. This fractured bedrock serves as a shallow groundwater aquifer.

#### 3.0 METHODOLOGY

Prior to conducting the field delineation the following information sources were reviewed:

- USGS "Amador City" 7.5 minute topographic quadrangle
- Color aerial photography of the study area and vicinity
- Tentative Natural Resources Conservation Service soil survey maps and unit descriptions
- Hydric soil information obtained from the Natural Resources Conservation Service

The field delineation was conducted by AES biologists G. O. Graening, John Howe, and John Miller on November 19 and 25, 2003, and by Paul Garcia and John Miller on January 16, 2004. The *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) was used as the standard for determining if specific areas qualify as wetlands subject to the provisions of the Clean Water Act. U.S. Army Corps of Engineers' regulations (33 CFR 328) were used to determine the presence of jurisdictional "waters of the U.S." other than wetlands.

The entire study area was assessed in such a manner as to view all areas to the degree necessary to determine the presence or absence of jurisdictional features. Data collection points were chosen at representative locations and detailed information on vegetation, soils, and hydrology characteristics were taken for each data point. Plant nomenclature follows *The Jepson Manual: Higher Plants of California* (Hickman 1993). The 1988 *National List of Vascular Plant Species that Occur in Wetlands, California Region 0* (Reed 1988), was used to determine the status of observed plants as wetland indicator species. A standard Munsell<sup>®</sup> soil color chart was used to determine soil matrix and mottle colors.

Vernal pools were delineated with using a combination of out-of-season floristic data (presence or absence of patches of persistent plant skeletons of vernal pool endemic species) and topographic position since the site soils were generally thin and uniformly of high chroma, underlain by near-surface slate bedrock. Disturbance of the site included active grazing and historic mining activities, and remnant graded areas of an abandoned landing strip. The only areas meeting all three mandatory wetland criteria were beds of hydrophytes adjacent to a blue-line stream on the site. The floor of old stock ponds and blocked swales, and a leakage area at the base of one of the dams on the property, possessed hydrophytic vegetation and wetland hydrology, but generally lacked hydric soils. Instead

these sites had thin soils only a few inches thick that were underlain with slate bedrock, sometimes iron stained or with lightly discolored rocky clay chunks weathered from indurate slate slabs. Intermittent watercourses were assessed for indicators of two-year flood-flow such as down-cutting, microterraces, gravels, sands, and cobbles.

Data sheets which document the basis for determining if suspect features qualify as jurisdictional "waters of the U.S." were completed for representative locations and are included in the **Appendix** of this report. The boundaries of all "waters of the U.S." located in the study area were measured in the field and recorded on a 1" = 200' aerial photograph. These data were then digitized to calculate acreage and to produce the "waters of the U.S." delineation maps.

#### 4.0 **RESULTS**

#### 4.1 UPLAND HABITATS

#### ANNUAL GRASSLAND

The northeastern portion of the study area is this vegetated by annual grassland (Analytical Environmental Services, 2004). Plant species of these areas found during site visits include creeping bent (*Agrostis stolonifera*), silver European hairgrass (*Aira caryophyllea*), sweet vernal grass (*Anthoxanthum odoratum*), wild oat (*Avena fatua*), cultivated oat (*Avena sativa*), California brome (*Bromus carinatus*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), yellow starthistle (*Centaurea solstitialis*), dogtail fescue (*Cynosurus echinatus*), filaree (*Erodium cicutarium*), California fescue (*Festuca californica*), tarweed (*Hemizonia fasciculata*), meadow barley (*Hordeum brachyantherum*), Mediterranean barley (*Hordeum marinum* ssp. gussoneanum), weed barley (*Hordeum murinum* ssp. *leporinum*), hedge mustard (*Sisymbrium officinale*), milk thistle (*Silybum marianum*), winter vetch (*Vicia villosa*), and Zorro fescue (*Vulpia myuros*).

#### CHAPARRAL

Within the southern half of the project area chaparral occurs (Analytical Environmental Services, 2004). The chaparral within the project area is a chamise chaparral. Plants identified in these areas during site visits include chamise (*Adenostoma fasciculatum*), manzanita (*Arctostaphylos manzanita*), wood fern (*Dryopteris arguta*), yerba santa (*Eriodictyon californicum*), pearly everlasting (*Anaphalis margaritacea*), sticky monkey flower (*Mimulus aurantiacus*), and interior live oak (*Quercus wislizenii*).

#### OAK SAVANNA

Oak savanna comprises portions of the project area (Analytical Environmental Services, 2004), and it is often interspersed with annual grassland. The oak savanna of the site is dominated by blue oak (*Quercus douglasii*). Plants identified in these areas during site visits included primarily blue oak and the same dominant annual grasses identified in the previous paragraphs (Analytical Environmental Services, 2004).

#### OAK WOODLAND

Oak woodland is also present in the project area, and is dominated by blue oaks but also includes scattered interior live oaks, black oaks (*Quercus kelloggii*), gray pines (*Pinus sabiniana*), and ponderosa pines (*Pinus ponderosa*). Understory vegetation included poison oak (*Toxicodendron diversilobum*), manzanita (*Arctostaphylos manzanita*), toyon (*Heteromeles arbutifolia*), dogtail fescue, and goldenback fern (*Pentagramma triangularis* ssp. *triangularis*) (Analytical Environmental Services, 2004).

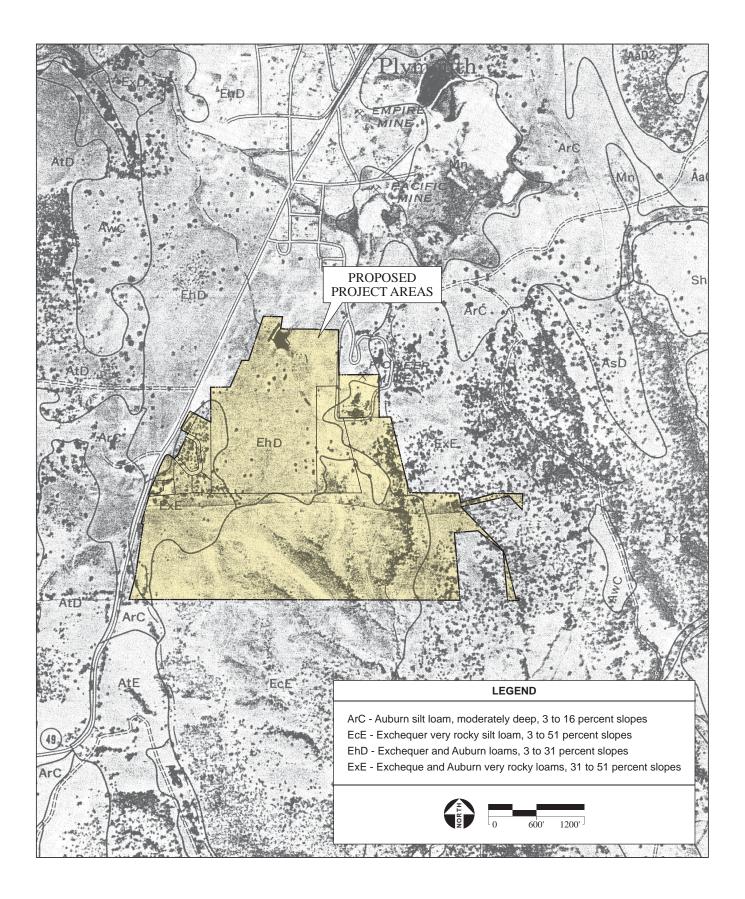
#### RIPARIAN WOODLAND

Riparian or moisture-loving plant habitat occurs in canyons and arroyos along rivers and streams and often forms scrub or woodland. Deciduous trees, shrubs, grasses and forbs dominate the riparian woodland of the site even though rivers and perennial streams are absent. Riparian woodlands occur in association with the ephemeral and intermittent drainages in Parcel 1. All but one of the riparian areas support a canopy dominated by interior live oaks, which intergrades with the adjoining chaparral. Dominant plant species identified in these areas during site visits included interior live oak, California buckeye (*Aesculus californicus*), toyon, California black walnut (*Juglans californica*), holly-leaf redberry (*Rhamnus ilicifolia*), and poison oak.

The deep eastern drainage on the site is steep sided with well-developed woodland equivalent to mixed oak-pine riparian woodland. Plant species identified in this area included interior live oak, black oak (*Quercus kelloggii*), California black walnut, gray pine, ponderosa pine, and red willow (*Salix laevigata*) (Analytical Environmental Services, 2004).

#### 4.2 SOIL TYPES

The soils of the project site consist of soils of the Auburn-Exchequer association (**Figure 4**). Soils of this association are characteristically very shallow to moderately deep, rocky or gravelly soils from



metabasic rocks and metasedimentary slate and schist. Vertical outcrops of schistose rocks occupy 20 to 50 percent of the surface in some areas with abundant rock fragments visible in profile. Exchequer soils adjoin Auburn soils (Sketchley, 1965).

The Auburn series of the association consists of well-drained, shallow to moderately deep soils formed from metabasic igneous rock and metasedimentary rock. The subsoil in the Auburn series ranges in color from yellow-red, reddish brown to brown. The Exchequer series of the association consists of excessively drained, very rocky, very shallow soils that are slightly acidic. Surface soil is granular, friable and slightly acidic very rocky silt loam. The soil color varies from dark brown, brown to grayish brown with a predominantly shallow depth to bedrock, about 6 inches in most places (Sketchley, 1965).

#### 4.3 HYDROLOGY

Portions of the site within the watershed of Dry Creek are characterized by dissected topography, which supports ephemeral to intermittent drainages. Surface water was observed flowing on January 16, 2004, but no flows were evident late the previous year. However, evidence of flow may be deduced from the rounding of angular sheets of slate that litter the floor of each drainage on the site. An excavated, disturbed intermittent stream runs parallel to State Highway 49, which was flowing in mid-January.

Slate bedrock is exposed at or near the surface on much of the site, and the near vertical bedding planes and indurate nature of the rock impedes groundwater recharge. Localized ponding was observed on January 16, 2004 in natural and man-made depressions on the site, especially in areas having thin soil and near-surface parent material. Hydrologic control is afforded by an abandoned landing strip on the site, which acts as a dam causing localized ponding in two areas. Several excavated cattle ponds occur on the site. All were filled with water by January 16, 2004. In addition, a constructed detention basin occurs adjacent to State Highway 49, and this had about six-inches of ponded water when the site was visited in mid-January.

Since the bulk of the site is on top of the hills on the south outskirts of the town of Plymouth, most of the hydrology emanates from precipitation, and there is little, if any runoff entering the property from surrounding lands.

#### 4.4 WATERS OF THE U.S.

The United States Fish & Wildlife Service has inventoried several wetlands in the area as part of its National Wetlands Inventory (NWI). These include palustrine emergent and unconsolidated wetlands

that were natural and/or impounded. All of the stock ponds and one of the seasonal ponds (i.e. the pond formed from the abandoned aircraft runway fill) appeared on the NWI (**Figure 5**).

The AES field survey confirmed the presence of the seasonal wetlands that were identified in the NWI, including cattle ponds, a detention basin, intermittent and ephemeral streams, vernal pools and swales; and, in addition, mapped additional potential waters of the U. S. features. These features are discussed below, appear as images (**Figure 6-1 and 6-2**), are mapped in **Figure 7**, and are documented by USACE data forms that appear in the **Appendix**.

#### Seasonal Wetlands

Seasonal wetlands are characterized by vegetation that is typically adapted to seasonal flooding and varying levels soils saturation. These areas are typically occurring either adjacent to streams or freshwater wetlands where seasonal flooding occurs, or in areas that have seasonally saturated soils either due to pooling of seasonal rains or due to shallow groundwater conditions. These features include cattle ponds, a detention basin, a modified drainage, vernal swales/pools, and other seasonal wetlands (**Figures 6-1, 6-2, and 7**).

#### CATTLE PONDS

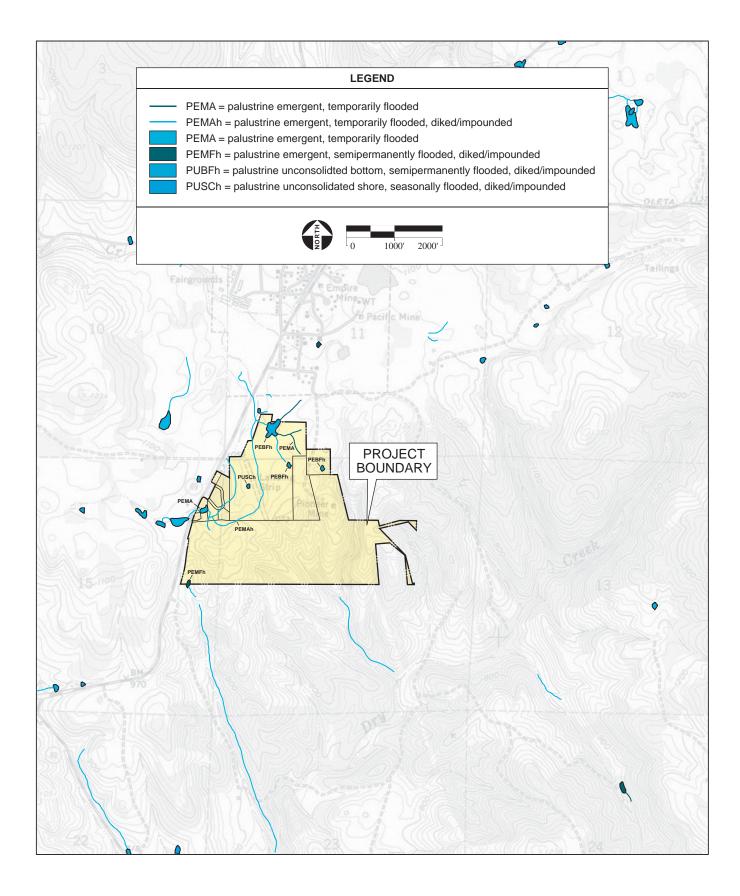
Four cattle ponds occur on the project site. A cattle pond was observed near the southwest corner of Parcel 1. This feature is fed by two swales that capture runoff from nearby Highway 49 and the surrounding landscape. The pond and its perimeter are devoid of vegetation, except for scattered willow weed (*Polygonum lapathifolium*). This feature is a result of excavation and damming to create an impoundment suitable for stock watering (**Figures 6-1, 6-2, and 7**).

Another cattle pond is located near the northern boundary of Parcel 3. The impoundment consists of open water that varies in depth through out the season and a peripheral area that is saturated long enough through the wet season to support a thick herbaceous layer dominated by spikerush (*Eleocharis macrostachya*). This feature is a result of excavation and damming of a swale for purposes of stock watering. Below the dam face a small seep exists. The seep is vegetated with spikerush and Baltic rush (*Juncus balticus*) (**Figures 6-1, 6-2, and 7**).

A third cattle pond occurs along the eastern boundary of Parcel 3. No vegetation was observed in association with this pond. The fourth cattle pond is at the edge of the central parcel.

#### DETENTION BASIN AND INTERMITTENT DRAINAGE

A detention basin exists along the western boundary of Parcel 7. This feature appears to collect runoff from this portion of the site and channel it into a culvert that daylights just north of the gas





#### Photograph 1

Intermittent stream in an excavated ditch fronting State Highway 49.



#### Photograph 2

Seasonal wetland formed when the abandoned aircraft runway in the center of the image, blocked a vernal swale.



#### Photograph 3

Large stock watering pond at the northwest corner of the project site.



## **Photograph 4** Stock watering pond in the northwest corner of the project site.





**Photograph 5** Pond showing its position relative to the abandoned aircraft runway.

Photograph 6 Vernal pond and swale.



Photograph 7 Cattle Pond

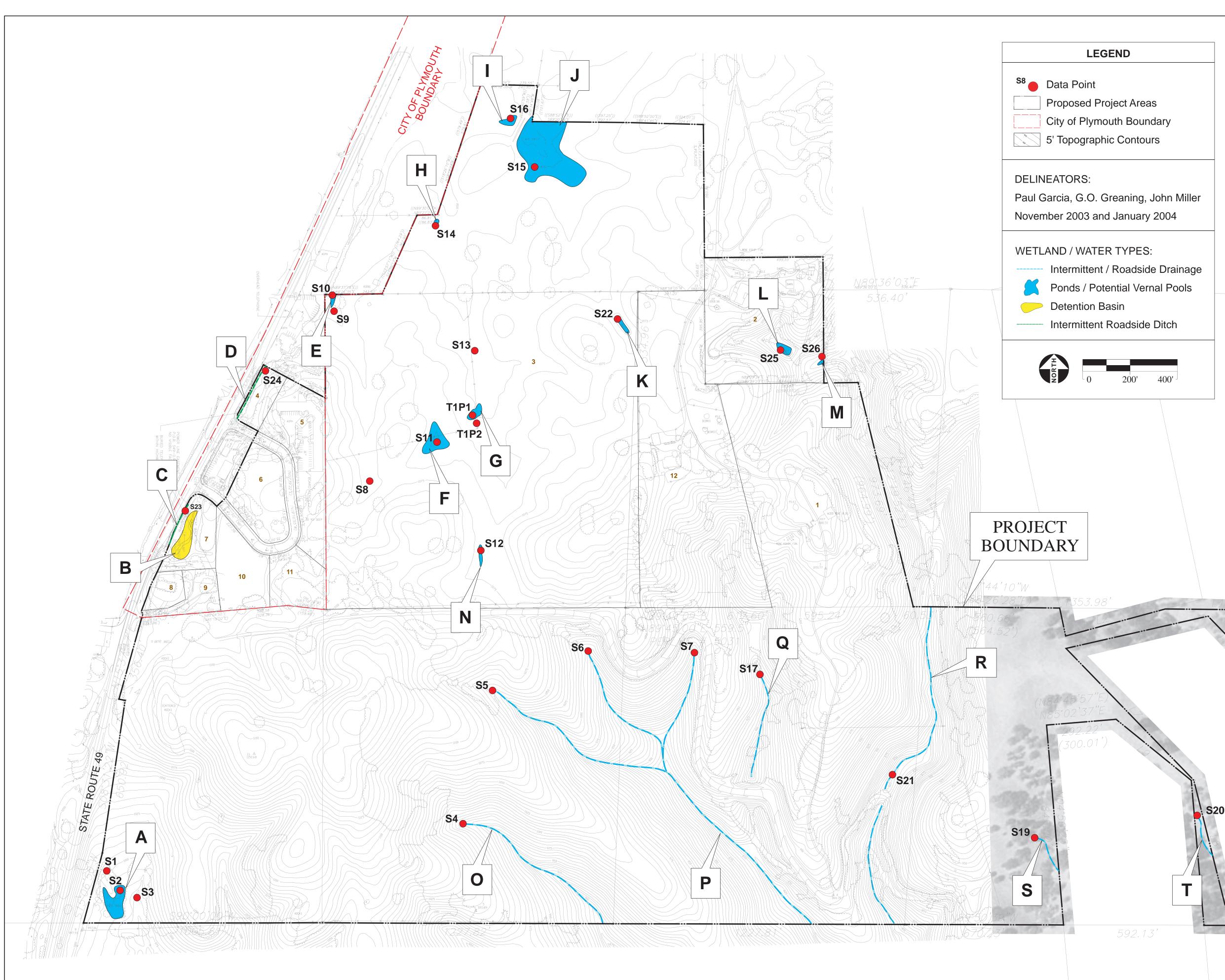


#### Photograph 8

Head of a tributary to Dry Creek. Water flows out of a spring where down cutting of a channel first became discernable.

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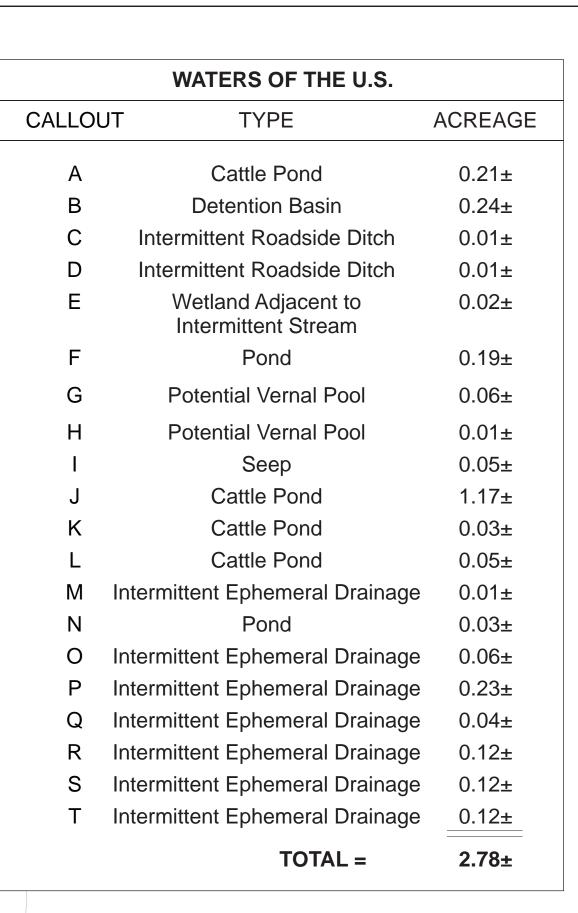
**Figure 6-2** Site Photographs



SOURCE: USGS Aerial Photograph, 8/16/1998 ; American Aerial Mapping, 2003 ; AES, 2004







| PARCELS |            |             |  |  |  |  |
|---------|------------|-------------|--|--|--|--|
| PARCEL  | APN #      | ACREAGE     |  |  |  |  |
| 1       | 08-110-009 | 137.78±     |  |  |  |  |
| 2       | 08-110-022 | 7.86±       |  |  |  |  |
| 3       | 08-110-026 | 60.0±       |  |  |  |  |
| 4       | 10-200-003 | 0.64±       |  |  |  |  |
| 5       | 10-200-004 | 2.68±       |  |  |  |  |
| 6       | 10-200-006 | 1.65±       |  |  |  |  |
| 7       | 10-200-007 | 1.19±       |  |  |  |  |
| 8       | 10-200-008 | 0.53±       |  |  |  |  |
| 9       | 10-200-009 | 0.81±       |  |  |  |  |
| 10      | 10-200-010 | 1.56±       |  |  |  |  |
| 11      | 10-200-011 | 1.22±       |  |  |  |  |
| 12      | 08-110-021 | 12.12±      |  |  |  |  |
|         | ΤΟΤΑΙ      | L = 228.04± |  |  |  |  |

Ione Band of Miwok Indians Casino Project Waters of the US /203525  $\blacksquare$ Figure 7

Delineation of Waters of the United States (Revised 10/26/2004)

station and continues as a roadside ditch. The ditch is shown as an intermittent drainage on the USGS quadrangle map. This portion of the drainage appears to be a modification of a historic drainage that once flowed through the western portion of Parcel 4 paralleling State Route 49. Dominant plants identified during site visits include broadleaf cattail (*Typha latifolia*), and Himalaya blackberry (*Rubus discolor*). Plants identified within the drainage include broadleaf cattail, curly dock (*Rumex crispus*), red willow (*Salix laevigata*), and arroyo willow (*Salix lasiolepis*).

#### INTERMITTENT AND EPHEMERAL DRAINAGES

The floor of ephemeral drainages is littered with partially rounded slate fragments and slabs, and vegetated with non-native grasses and forbs and often shaded by the canopies of the riparian shrubs and trees (Analytical Environmental Services, 2004). The first evidence of flow in these channels is a down-cut channel and seep point or spring at the head of the deeper canyons (**Figure 6-2**).

#### VERNAL POOLS

The area in the vicinity of the abandoned aircraft runway (visible on the USGS quadrangle map) in Parcel 3 has a vernal pool and seasonal pond (see next (**Figures 6-1, 6-2, and 7**). These areas were either saturated to the surface or ponded water on January 16, 2004, but were completely dry two month's earlier.

Vernal pools of the Plymouth site formed in thin subsoil, only a few inches thick; weathered from shallow, indurate slate bedrock, often in tilted or near vertical bedding planes. Evidently, the shallow slate bedrock blocks infiltration of surface water for a period of time long enough the support the growth of vernal pool indicator species and obligate wetland plants in ponded microsites. Plants identified at the time of the surveys included spikerush (*Eleocharis macrostachya*), Vasey's branching coyote thistle (*Eryngium castrense*), and pillwort (*Pilularia americana*). The spring flora of these pools has not yet been studied (**Appendix; Figures 6-1, 6-2, and 7**).

#### OTHER SEASONAL WETLANDS

Two other areas of seasonal wetlands exist within Parcel 3. One of these features is a seasonal wetland that the abandoned aircraft runway grade formed by impounding water on the uphill side of it. This feature pools water during the winter and is dominated by spikerush. The other area consists of two small wetland areas near the western boundary of Parcel 3. These features are associated with a swale that drains into the aforementioned drainage that runs immediately adjacent to this portion of the site. These features are severely disturbed by cattle. The seasonal wetland area associated with the abandoned aircraft runway is dominated by spikerush. Plant fragments identified in the wetland area near the drainage during the late fall surveys include Dallis grass (*Paspalum dilatatum*), crab grass

(*Cynodon dactylon*), loosestrife hyssop (*Lythrum hyssopifolium*), and Himalaya blackberry (*Rubus discolor*) (**Figures 6-1, 6-2 and 7**).

The "waters of the U.S." of the site occupy a total of 3.41 acres. **Table 1** below provides an acreage summary. The "Waters of the U.S." delineation map is folded in the rear pocket of the report and constitutes **Figure 7**. Completed standard USACE 1987 Manual data forms appear in the **Appendix**.

|   | Mapping Callout on  | _       |
|---|---------------------|---------|
| Feature                                 | Figure 7            | Acreage |
| Cattle Ponds                            | A, J, K, & L        | 1.46    |
| Detention Basin                         | В                   | 0.24    |
| Intermittent Road Side Ditch            | C & D               | 0.02    |
| Ponds                                   | F & N               | 0.22    |
| Wetland Adjacent to Intermittent Stream | Е                   | 0.02    |
| Potential Vernal Pools                  | G & H               | 0.07    |
| Intermittent and Ephemeral Drainages    | M, O, P, Q, R, S, T | 0.7     |
| Seep                                    | I                   | 0.05    |
| TO                                      | ΓAL                 | 2.78    |

TABLE 1.WATERS OF THE U. S. SUMMARY

#### 5.0 SUMMARY

Analytical Environmental Services has conducted a delineation of "waters of the U.S." occurring within the 230± acre Ione Casino study area. The study area is located near Plymouth, and is adjacent to State Route 49 in Amador County, California. The study area was systematically walked by AES biologists on November 19 and 25, 2003; and on January 16, 2004. All areas were viewed to the degree necessary to determine the presence or absence of jurisdictional "waters of the U.S." Waters of the U.S. have been mapped within the study area including intermittent and ephemeral streams, cattle ponds, vernal pools and a vernal swale. These "waters of the U.S." occupy a total of 2.78 acres.

#### 6.0 **REFERENCES**

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# **APPENDIX**

**DELINEATION DATA SHEETS** 

#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

| Project/Site Ione Casino Project                                      |        | Date       | 11/19/03            |
|---|--------|------------|---------------------|
| Applicant / Owner   |        | County     | Amador              |
| Investigator G.O. Graening, John Howe, John M.                        | ller   | State      | ĊA                  |
| Do Normal Circumstances exist on the site?                            |        | Communi    | ty ID               |
| Is the site significantly disturbed (Atypical Situation)?             | YES NO | Transect I | D Swale Sof Huy .49 |
| Is the area a potential Problem Area? (If needed, explain on reverse) | YES NO |            | 51                  |

#### VEGETATION

| Dominant Plant Species             | Stratum     | Indicator    | Dominant Plant Species  | Stratum | Indicator |  |  |
|------------------------------------|-------------|--------------|-------------------------|---------|-----------|--|--|
| 1 Quercus douglasii                | T           | NOL          | 9                       |         |           |  |  |
| 2 Toxico dendron diversilobum      | 5           | NOL          | 10                      |         |           |  |  |
| 3                                  |             |              | 11                      |         |           |  |  |
| 4                                  |             |              | 12                      |         |           |  |  |
| 5                                  |             |              | 13                      |         |           |  |  |
| 6                                  |             |              | 14                      |         |           |  |  |
| 7                                  |             |              | 15                      |         |           |  |  |
| 8                                  |             |              | 16                      |         |           |  |  |
| Percent of Dominant Species that a | re OBL, FAC | W, or FAC (e | excluding FAC-) $0/2 =$ | 0%      |           |  |  |
| Remarks                            |             |              |                         |         |           |  |  |
| Criteria not met                   |             |              |                         |         |           |  |  |
|                                    |             |              |                         |         |           |  |  |
|                                    |             |              |                         |         |           |  |  |

#### HYDROLOGY

| Recorded Data (Describe i<br>Stream, Lake, or Tide<br>Aerial Photographs<br>Other | Gauge . | WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits |  |
|---|---------|---|--|
| FIELD OBSERV  | ATIONS  | Drainage Patterns in Wetlands   |  |
| Depth of Surface Water  | ø       | (in)  | Secondary Indicators (2 or more Required): |
| Depth to Free Water in Pit  | N/A     | <ul> <li>Water-Stained Leaves</li> <li>Local Soil Survey Data</li> </ul>  |  |
| Depth to Saturated Soil   | N/A     | ☐ FAC-Neutral Test<br>☐ Other (Explain in Remarks)  |  |

No indicators

| Map Unit Name (        | Series and Phase)                 | : Exchegair # Ai                | abara very tocky                 | Drainage Class: 040                             | essively diamed                          |  |  |
|------------------------|-----------------------------------|---------------------------------|----------------------------------|---|--|--|--|
| Taxonomy (Subg         |                                   | /                               |                                  | Confirm Mapped Type?                            | YES NO                                   |  |  |
|                        |                                   | PROFIL                          | E DESCRIPTION                    |   |  |  |  |
| Depth<br>(inches)      | Horizon                           | Matrix Color<br>(Munsell Moist) | Mottle Colors<br>(Munsell Moist) | Mottle<br>Abundance/Contrast                    | Texture, Concretions,<br>Structure, etc. |  |  |
|                        |                                   |                                 |                                  |   |  |  |  |
|                        |                                   |                                 |                                  |   |  |  |  |
|                        |                                   |                                 |                                  |   |  |  |  |
|                        |                                   |                                 |                                  |   |  |  |  |
|                        |                                   |                                 |                                  |   |  |  |  |
|                        |                                   | HYDRIC                          | SOIL INDICATORS:                 |   |  |  |  |
| Histosol               |                                   |                                 | Concreti                         |   |  |  |  |
| Histic Epi             |                                   |                                 |                                  | ganic Content in Surface                        |  |  |  |
| Sulfidic C             |                                   |                                 |                                  | Streaking in Sandy Soil                         |  |  |  |
|                        | isture Regime                     |                                 |                                  | n Local Hydric Soils List                       |  |  |  |
|                        | r Conditions<br>r Low-Chroma Colo |                                 | _                                | n National Hydric Soils I<br>xplain in Remarks) | _ist                                     |  |  |
| Remarks:               | r Low-Chroma Con                  |                                 |                                  | xpiain in Remarks)                              |  |  |  |
| No pit excavated here. |                                   |                                 |                                  |   |  |  |  |
|                        |                                   |                                 |                                  |   |  |  |  |

| Hydrophytic Vegetation Present? | YES NO      |   |
|---------------------------------|-------------|---|
| Wetland Hydrology Present?      | YES NO      | Is this Sampling Point Within a Wetland? YES (NO) |
| Hydric Soils Present?           | YES NO      |   |
| Remarks<br>ND indicators;       | no evidence | e of flow.  |
|                                 |             |   |
|                                 |             |   |
|                                 |             |   |
|                                 |             |   |

DATA FORM - ROUTINE WETLAND DETERMINATION

#### ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

| Project/Site Ione Casino Project                                      |          | Date       | 11/19/03                 |
|---|----------|------------|--------------------------|
| Applicant / Owner   |          | County     | Amador                   |
| Investigator G.O. Graening, John Howe, John                           | Miller   | State      | CA                       |
| Do Normal Circumstances exist on the site?                            | (YES) NO | Community  | y ID                     |
| Is the site significantly disturbed (Atypical Situation)?             | YES NO   | Transect I | D Stock pond S of Huy 49 |
| Is the area a potential Problem Area? (If needed, explain on reverse) | YES NO   | Plot ID    | SZ                       |

#### VEGETATION

| Dominant Plant Species             | Stratum     | Indicator    | Dominant Plant Species | Stratum | Indicator |  |  |
|------------------------------------|-------------|--------------|------------------------|---------|-----------|--|--|
| 1 Polygonum lapathifolium          | H           | OBL          | 9                      |         |           |  |  |
| 2                                  |             |              | 10                     |         |           |  |  |
| 3                                  |             |              | 11                     |         |           |  |  |
| 4                                  |             |              | 12                     |         |           |  |  |
| 5                                  |             |              | 13                     |         |           |  |  |
| 6                                  |             |              | 14                     |         |           |  |  |
| 7                                  |             |              | 15                     |         |           |  |  |
| 8                                  |             |              | 16                     |         |           |  |  |
| Percent of Dominant Species that a | re OBL, FAC | W, or FAC (e | excluding FAC-)        | 0%      |           |  |  |
| Remarks                            |             |              |                        |         |           |  |  |
| Criteria met.                      |             |              |                        |         |           |  |  |
|                                    |             |              |                        |         |           |  |  |
|                                    |             |              |                        |         |           |  |  |

| HYDROLOGY |
|-----------|
|-----------|

| <ul> <li>Recorded Data (Describe in Remarks)</li> <li>Stream, Lake, or Tide Gauge</li> <li>Aerial Photographs</li> <li>Other</li> </ul> |            |      | WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches |
|---|------------|------|---|
| No Recorded Data Available  |            |      | Drift Lines<br>Sediment Deposits  |
| FIELD OBSERVATIONS  |            |      | Drainage Patterns in Wetlands   |
| Depth of Surface Water  | Ø          | (in) | Secondary Indicators (2 or more Required):  |
| Depth to Free Water in Pit  | >18        | (in) | Water-Stained Leaves  |
| Depth to Saturated Soil   | >18        | (in) | ☐ FAC-Neutral Test<br>☐ Other (Explain in Remarks)                                      |
| Criteria met.   | Site is a, | main | tained stock watering pond.   |

| OILS              |                               |                                 |  | loam; 3          | 14.51                                       | perant slipe S2                          |
|-------------------|-------------------------------|---------------------------------|--|------------------|---|--|
| Map Unit Name (S  | eries and Phase):             | Exchequer #                     | Auburn Very rock)  |                  |   | essively drained                         |
| Taxonomy (Subgro  |                               | ţ.                              | Field Observations   |                  |   | /  |
|                   |                               | PROF                            | ILE DESCRIPTION  |                  |   |  |
| Depth<br>(inches) | Horizon                       | Matrix Color<br>(Munsell Moist) | Mottle Colors<br>(Munsell Moist)                                 | Mot<br>Abundance |   | Texture, Concretions,<br>Structure, etc. |
| 0-12              | B                             | 10YR 4/2                        | 7.5YR 5/6  | 80%              | dull  | clay                                     |
| 12-18             | C                             | 2.5Y 7/6                        |  |                  |   | inived up 7.57R SI                       |
|                   |                               |                                 |  |                  |   | Clay                                     |
|                   |                               |                                 |  |                  |   |  |
|                   |                               | HYDRIC                          | SOIL INDICATORS:   | <u> </u>         |   | I  |
| Reducing (        | lor<br>sture Regime           |                                 | ☐ Concret<br>☐ High Org<br>☐ Organic<br>☐ Listed o<br>☐ Listed o |                  | Sandy Soil<br>c Soils List<br>⁄dric Soils I |  |
| water of          | s within a foo<br>the stock j | t of the surt                   | ace and has been   | , subjected      | to wea                                      | thising by the                           |

| Hydrophytic Vegetation Present? | YES NO |   |
|---------------------------------|--------|---|
| Wetland Hydrology Present?      | YES NO | Is this Sampling Point Within a Wetland? YES NO |
| Hydric Soils Present?           | MES NO |   |
| Remarks                         |        |   |

Remarks

Site is a man-made stock pond with wetland Characteristics -

#### ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

| Project/Site Ione Casino Project  | Date 11/19/03                    |
|---|----------------------------------|
| Applicant / Owner   | County Amador                    |
| Investigator G.O. Graening, John Howe, John Miller  | State CA                         |
| Investigator G.O. Gitmening , John Howe, John Miller<br>Do Normal Circumstances exist on the site? (YES) NO | Community ID                     |
| Is the site significantly disturbed (Atypical Situation)? YES NO  | ) Transect ID Swale SE of Hwy 49 |
| Is the area a potential Problem Area? (If needed, explain on reverse) YES (NO                               | ) Plot ID S3                     |

#### VEGETATION

· .4

. : . . 1

, ,

| Dominant Plant Species   | Stratum | Indicator | Dominant Plant Species | Stratum | Indicator |  |  |
|--|---------|-----------|------------------------|---------|-----------|--|--|
| 1 Quercus douglasii  | T       | NOL       | 9                      |         |           |  |  |
| 2 Claytonia parviflora   | H       | FAC       | 10                     |         |           |  |  |
| 3 Avena fatua  | H       | NOL       | 11                     |         |           |  |  |
| 4  |         |           | 12                     |         |           |  |  |
| 5  |         |           | 13                     |         |           |  |  |
| 6  |         |           | 14                     |         |           |  |  |
| 7  |         |           | 15                     |         |           |  |  |
| 8  |         |           | 16                     |         |           |  |  |
| Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-) $1/3 = 33\%$ |         |           |                        |         |           |  |  |
| Remarks  |         |           |                        | 3       |           |  |  |
| Criteria not met.  |         |           |                        |         |           |  |  |
|  |         |           |                        |         |           |  |  |
|  |         |           |                        |         |           |  |  |
|  |         |           |                        |         |           |  |  |

#### HYDROLOGY

| Recorded Data (Describe in     Stream, Lake, or Tide     Aerial Photographs     Other     No Recorded Data Availab     FIELD OBSERV | Gauge    |      | WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands |
|---|----------|------|---|
| Depth of Surface Water  | Ø        | (in) | Secondary Indicators (2 or more Required):  |
| Depth to Free Water in Pit  | N/A (in) |      | Water-Stained Leaves  |
| Depth to Saturated Soil   | N/A      | (in) | General Test General Test Other (Explain in Remarks)  |

No indicators -

| Map Unit Name (Series and Phase): Exchequer & Auburn very rocky Drainage Class: excessively drained  |            |                                 |                                  |                              |   |  |  |  |
|--|------------|---------------------------------|----------------------------------|------------------------------|---|--|--|--|
| Taxonomy (Subgr  |            | Confirm Mapped Type?            | 1                                |                              |   |  |  |  |
|  |            |                                 |                                  |                              |   |  |  |  |
| Depth<br>(inches)  | Horizon    | Matrix Color<br>(Munsell Moist) | Mottle Colors<br>(Munsell Moist) | Mottle<br>Abundance/Contrast | Texture, Concretions<br>Structure, etc. |  |  |  |
|  |            |                                 |                                  |                              |   |  |  |  |
|  |            |                                 |                                  |                              |   |  |  |  |
|  |            |                                 |                                  |                              |   |  |  |  |
|  |            |                                 |                                  |                              |   |  |  |  |
|  |            |                                 |                                  |                              |   |  |  |  |
| HYDRIC SOIL INDICATORS:  |            |                                 |                                  |                              |   |  |  |  |
| Histosol       Concretions         Histic Epipedon       High Organic Content in Surface Layer in Sandy         Sulfidic Odor       Organic Streaking in Sandy Soils         Aquic Moisture Regime       Listed on Local Hydric Soils List         Reducing Conditions       Listed on National Hydric Soils List         Gleyed or Low-Chroma Colors       Other (Explain in Remarks) |            |                                 |                                  |                              |   |  |  |  |
| Remarks:<br>No pr  | 4 was exce | auded here.                     |                                  |                              |   |  |  |  |

| Hydrophytic Vegetation Present? | YES | NO |  |     | 0   |
|---------------------------------|-----|----|--|-----|---|
| Wetland Hydrology Present?      | YES | NO | Is this Sampling Point Within a Wetland? | YES | (NO)  |
| Hydric Soils Present?           | YES | NO |  |     | $\bigcirc$  |
| Remarks                         |     |    |  |     | and a second state of the |

Remarks

No indicators. No evidence of flow.

DATA FORM - ROUTINE WETLAND DETERMINATION

### ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

| Project/Site Ione Casino Project.                                     |          | Date       | 11/19/03                |
|---|----------|------------|-------------------------|
| Applicant / Owner   |          | County     | Amador                  |
| Investigator G.O. Graening, John Howe, John                           | Miller   | State      | CA                      |
| Do Normal Circumstances exist on the site?                            | (YES) NO | Communi    | ty ID                   |
| Is the site significantly disturbed (Atypical Situation)?             | YES NO   | Transect I | D NW DryCr. Trib W bray |
| Is the area a potential Problem Area? (If needed, explain on reverse) | YES NO   | Plot ID    | 54                      |

#### VEGETATION

| Dominant Plant Species             | Stratum     | Indicator    | Dominant Plant Species    | Stratum | Indicator |
|------------------------------------|-------------|--------------|---------------------------|---------|-----------|
| 1 Quereus Wislitenii               | T           | NOL          | 9                         |         |           |
| 2 Toxicodendron diversilibum       | S           | NOL          | 10                        |         |           |
| 3 Heteromeles arbut folia          | S           | NOL          | 11                        |         |           |
| 4 Ademstima fasciculatura          | S           | NOL.         | 12                        |         |           |
| 5 Artostaphyles Manzanita          | S           | NOL          | 13                        |         |           |
| 6                                  |             |              | 14                        |         |           |
| 7                                  |             |              | 15                        |         |           |
| 8                                  |             |              | 16                        |         |           |
| Percent of Dominant Species that a | re OBL, FAC | W, or FAC (e | excluding FAC-) $0/5 = 0$ | 1/8     |           |
| Remarks<br>Criteria not n          | eet.        |              |                           |         |           |

#### HYDROLOGY

| <ul> <li>Recorded Data (Describe in Remarks)</li> <li>Stream, Lake, or Tide Gauge</li> <li>Aerial Photographs</li> <li>Other</li> </ul> |                |      | WETLAND HYDROLOGY INDICATORS<br>Primary Indicators:<br>Inundated<br>Saturated in Upper 12 Inches<br>Water Marks On Slate fragments<br>Drift Lines |
|---|----------------|------|---|
| No Recorded Data Available  |                |      | Sediment Deposits   |
| FIELD OBSERVATIONS  |                |      | Drainage Patterns in Wetlands   |
| Depth of Surface Water  | Ø              | (in) | Secondary Indicators (2 or more Required):  |
| Depth to Free Water in Pit  | N/A            | (in) | <ul> <li>Water-Stained Leaves</li> <li>Local Soil Survey Data</li> </ul>  |
| Depth to Saturated Soil   | N/A            | (in) | ☐ FAC-Neutral Test<br>☐ Other (Explain in Remarks)  |
| Weak indicators o<br>Downcutting appro  | t intermittent |      | low at upper end of draininge.  |

| SOILS             |   |                                 | 10                                   | am, 31 to 51 pe              | runt stopes. 54                          |  |
|-------------------|---|---------------------------------|--------------------------------------|------------------------------|--|--|
| Map Unit Name (S  | eries and Phase):                         | Exchequer ve                    |                                      | Drainage Class: On           |  |  |
| Taxonomy (Subgro  |   | U                               |                                      | Confirm Mapped Type?         | 1  |  |
|                   |   | PROFIL                          | E DESCRIPTION                        |                              |  |  |
| Depth<br>(inches) | Horizon                                   | Matrix Color<br>(Munsell Moist) | Mottle Colors<br>(Munsell Moist)     | Mottle<br>Abundance/Contrast | Texture, Concretions,<br>Structure, etc. |  |
|                   |   |                                 |                                      |                              |  |  |
|                   |   |                                 |                                      |                              |  |  |
| -                 |   |                                 |                                      |                              |  |  |
|                   |   |                                 |                                      |                              |  |  |
|                   |   |                                 |                                      |                              |  |  |
|                   |   |                                 |                                      |                              |  |  |
|                   |   |                                 |                                      |                              |  |  |
|                   |   | HYDRIC                          | SOIL INDICATORS:                     |                              |  |  |
| Histosol          |   |                                 | Concreti                             | ons                          |  |  |
| Histic Epip       |   |                                 | High Org                             | ganic Content in Surface     | e Layer in Sandy Soils                   |  |
| Sulfidic Od       |   |                                 |                                      | Streaking in Sandy Soil      |  |  |
| -                 | sture Regime                              |                                 | Listed on Local Hydric Soils List    |                              |  |  |
|                   |   |                                 | Listed on National Hydric Soils List |                              |  |  |
| Gleyed or I       | Low-Chroma Cold                           | ors                             | L Other (E                           | xplain in Remarks)           |  |  |
| Remarks:          | in an |                                 |                                      |                              |  |  |
| No pin            | t was exca                                | vated here.                     |                                      |                              |  |  |
|                   |   |                                 |                                      |                              |  |  |

| Hydrophytic Vegetation Present? | YES NO   |  |          |
|---------------------------------|----------|--|----------|
| Wetland Hydrology Present?      | (YES) NO | Is this Sampling Point Within a Wetland? | YES NO   |
| Hydric Soils Present?           | YES NO   |  | $\smile$ |
| Remarks                         |          |  |          |

Site is at or hear the upper end of an intermittent drainage in an ephemeral channel. Weak indicator + of flow.

#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

| Project/Site Ione Casino Project  | Date 11/19/03                         |
|---|---------------------------------------|
| Applicant / Owner   | County Amader                         |
| Investigator G.D. Graching, John Howe, John Miller                            | State C.A                             |
| Do Normal Circumstances exist on the site?                                    | Community ID                          |
| Is the site significantly disturbed (Atypical Situation)? YES NO              | ) Transect ID NW Dry Cr. Trib. WAW bi |
| Is the area a potential Problem Area? (If needed, explain on reverse) YES (NO | Plot ID S5                            |

#### VEGETATION

| Dominant Plant Species             | Stratum     | Indicator    | Dominant Plant Species    | Stratum | Indicator |
|------------------------------------|-------------|--------------|---------------------------|---------|-----------|
| 1 QUERCUL Wishtenii                | T           | NOL          | 9                         |         |           |
| 2 Toxicodendron diversilobum       | 5           | NOL          | 10                        |         |           |
| 3 Cynosurus Cchinatul              | H           | NOL          | 11                        |         |           |
| 4                                  |             |              | 12                        |         |           |
| 5                                  |             |              | 13                        |         |           |
| 6                                  |             |              | 14                        |         |           |
| 7                                  |             |              | 15                        |         |           |
| 8                                  |             |              | 16                        |         |           |
| Percent of Dominant Species that a | re OBL, FAC | W, or FAC (e | excluding FAC-) $D/3 = 0$ | 1/8     |           |
| Remarks<br>Critcria not n          | met -       |              |                           |         |           |

#### HYDROLOGY

| <ul> <li>Recorded Data (Describe in Remarks)</li> <li>Stream, Lake, or Tide Gauge</li> <li>Aerial Photographs</li> <li>Other</li> </ul> |               |      | WETLAND HYDROLOGY INDICATORS Primary Indicators:  Inundated Saturated in Upper 12 Inches Water Marks Drift Lines |
|---|---------------|------|--|
| FIELD OBSERVATIONS  |               |      | ☑ Sediment Deposits<br>□ Drainage Patterns in Wetlands   |
| Depth of Surface Water  | Ø             | (in) | Secondary Indicators (2 or more Required):   |
| Depth to Free Water in Pit  | N/A           | (in) | Water-Stained Leaves   |
| Depth to Saturated Soil   | H/A           | (in) | ☐ FAC-Neutral Test<br>☐ Other (Explain in Remarks)   |
| Beginnings of channi  | el incision ; | Sort | ling of fines.   |

| SOILS             |                  |                                 | Party Contractory and a contractory and the party of the second second second second second second second second | 31 to 51 percent             | slopes - SE                              |  |
|-------------------|------------------|---------------------------------|--|------------------------------|--|--|
| Map Unit Name (S  | eries and Phase) | : Exchequer very                | rocky silt lum,  | Drainage Class: Px(          | essively drained                         |  |
| Taxonomy (Subgro  | pup)             | 0 /                             | Field Observations   | Confirm Mapped Type?         | YES NO                                   |  |
|                   |                  | PROFIL                          | E DESCRIPTION  |                              |  |  |
| Depth<br>(inches) | Horizon          | Matrix Color<br>(Munsell Moist) | Mottle Colors<br>(Munsell Moist)   | Mottle<br>Abundance/Contrast | Texture, Concretions,<br>Structure, etc. |  |
|                   |                  |                                 |  |                              |  |  |
|                   |                  |                                 |  |                              |  |  |
|                   |                  |                                 |  |                              |  |  |
|                   |                  |                                 |  |                              |  |  |
|                   |                  |                                 |  |                              |  |  |
|                   |                  |                                 |  |                              |  |  |
|                   |                  | HYDRIC S                        | SOIL INDICATORS:   |                              |  |  |
| Histosol          |                  |                                 | Concreti   | ons                          |  |  |
| Histic Epip       |                  |                                 | High Org   | anic Content in Surface      | e Layer in Sandy Soils                   |  |
| Sulfidic Od       |                  |                                 | └── Organic Streaking in Sandy Soils   |                              |  |  |
|                   | ture Regime      |                                 | Listed on Local Hydric Soils List  |                              |  |  |
| Reducing C        |                  |                                 | Listed on National Hydric Soils List   |                              |  |  |
| Gleyed or L       | _ow-Chroma Cold  | ors                             | U Other (E   | xplain in Remarks)           |  |  |
| Remarks:          |                  |                                 |  |                              |  |  |
| No p              | it was exci      | availed here.                   |  |                              |  |  |
|                   |                  |                                 |  |                              |  |  |
|                   |                  |                                 |  |                              |  |  |

| Hydrophytic Vegetation Present? | YES (NO) |   |  |  |
|---------------------------------|----------|---|--|--|
| Wetland Hydrology Present?      | (YES NO  | Is this Sampling Point Within a Wetland? YES (NO) |  |  |
| Hydric Soils Present?           | YES NO   |   |  |  |
| Remarks                         |          |   |  |  |
| to ephemeral fi                 |          | of a drainage with intermittent                   |  |  |
|                                 |          |   |  |  |
|                                 |          |   |  |  |
|                                 |          |   |  |  |
|                                 |          |   |  |  |

#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

| Project/Site Ione Casino Project  | Date 11/19/03                       |
|---|-------------------------------------|
| Applicant / Owner   | County Amadoir                      |
| Investigator G.O. Ginening, John Howe, John Miller<br>Do Normal Circumstances exist on the site? (YES) NO | State CA                            |
| Do Normal Circumstances exist on the site?  | Community ID                        |
| Is the site significantly disturbed (Atypical Situation)? YES NO  | Transect ID NW Dry CL-Trib. NW bran |
| Is the area a potential Problem Area? (If needed, explain on reverse) YES (NO                             | Plot ID SG                          |

#### VEGETATION

| Dominant Plant Species             | Stratum     | Indicator    | Dominant Plant Species Stratum |    | Indicator |
|------------------------------------|-------------|--------------|--------------------------------|----|-----------|
| 1 Quercus Wislizenii               | T           | NOL          | 9                              |    |           |
| 2 Toxicodendron diversilebun       | S           | NOL          | 10                             |    |           |
| 3 Cynosatus echinotus              | H           | NOL          | 11                             |    |           |
| 4                                  |             |              | 12                             |    |           |
| 5                                  |             |              | 13                             |    |           |
| 6                                  |             |              | 14                             |    |           |
| 7                                  |             |              | 15                             |    |           |
| 8                                  |             |              | 16                             |    |           |
| Percent of Dominant Species that a | re OBL, FAC | W, or FAC (e | excluding FAC-) $O/3 = 0$      | 18 |           |
| Remarks<br>Criteria hot            | met.        |              |                                |    |           |

#### HYDROLOGY

| <ul> <li>Recorded Data (Describe i</li> <li>Stream, Lake, or Tide</li> <li>Aerial Photographs</li> <li>Other</li> </ul> |                | WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines |
|---|----------------|---|
| No Recorded Data Availat  | le             | Sediment Deposits   |
| FIELD OBSERV  | ATIONS         | ☐ Drainage Patterns in Wetlands   |
| Depth of Surface Water  | Ø (in          | Secondary Indicators (2 or more Required):  |
| Depth to Free Water in Pit $N/A$ (in)   |                | Water-Stained Leaves  |
| Depth to Saturated Soil   | N/A (in        | FAC-Neutral Test ) Other (Explain in Remarks)   |
| Incised Channel 3-  | feet deep ; so | -ting of fine I   |

| SOILS             |                   |                                 |                                      | 31+151 percent               | -slopes, 56                              |  |
|-------------------|-------------------|---------------------------------|--------------------------------------|------------------------------|--|--|
| Map Unit Name (S  | eries and Phase): | Exchequer very                  | recky silt hom                       | Drainage Class: Cxc          | essively drained                         |  |
| Taxonomy (Subgro  |                   | 0 7                             |                                      | Confirm Mapped Type?         |  |  |
|                   |                   | PROFIL                          | E DESCRIPTION                        |                              | ·  |  |
| Depth<br>(inches) | Horizon           | Matrix Color<br>(Munsell Moist) | Mottle Colors<br>(Munsell Moist)     | Mottle<br>Abundance/Contrast | Texture, Concretions,<br>Structure, etc. |  |
|                   |                   |                                 |                                      |                              |  |  |
|                   |                   |                                 |                                      |                              |  |  |
|                   |                   |                                 |                                      |                              |  |  |
|                   |                   |                                 |                                      |                              |  |  |
|                   |                   |                                 |                                      |                              |  |  |
|                   |                   |                                 |                                      |                              |  |  |
|                   |                   |                                 |                                      |                              |  |  |
|                   |                   | HYDRIC S                        | SOIL INDICATORS:                     |                              |  |  |
| Histosol          |                   |                                 | Concreti                             |                              |  |  |
| Histic Epip       |                   |                                 |                                      | ganic Content in Surface     |  |  |
| Sulfidic Oc       |                   |                                 |                                      | Streaking in Sandy Soil      |  |  |
|                   | sture Regime      |                                 | Listed on Local Hydric Soils List    |                              |  |  |
|                   | Conditions        |                                 | Listed on National Hydric Soils List |                              |  |  |
| -                 | Low-Chroma Colo   | ors                             | └ Other (E                           | Explain in Remarks)          |  |  |
| Remarks:          |                   |                                 |                                      |                              |  |  |
| No 1              | it was exca       | voted hite -                    |                                      |                              |  |  |
| , , ,             |                   |                                 |                                      |                              |  |  |
|                   |                   |                                 |                                      |                              |  |  |
|                   |                   |                                 |                                      |                              |  |  |

| Hydrophytic Vegetation Present?   | YES NO      | ~   |  |
|-----------------------------------|-------------|---|--|
| Wetland Hydrology Present?        | YES NO      | Is this Sampling Point Within a Wetland? YES (NO) |  |
| Hydric Soils Present?             | YES NO      |   |  |
| Site is at -<br>to ephemeral flow | the upper e | nd of a drainage with intermittent                |  |

#### ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

| Project/Site Ione Casino Project                                      | ana can jang mang ang ng kang sa kang s | Date     | 11/19/03                      |
|---|---|----------|-------------------------------|
| Applicant / Owner   |   | County   | Amador                        |
| Investigator G.O. Graening, John Howe, John                           | Miller  | State    | CA                            |
| Do Normal Circumstances exist on the site?                            | (YES) NO  | Commun   | -                             |
| Is the site significantly disturbed (Atypical Situation)?             | YES NO  | Transect | 10 NW Diry Ct. Trib. N branch |
| Is the area a potential Problem Area? (If needed, explain on reverse) | YES NO  | Plot ID  | 57                            |

#### VEGETATION

| Dominant Plant Species             | Stratum      | Indicator   | Dominant Plant Species      | Stratum | Indicator |
|------------------------------------|--------------|-------------|-----------------------------|---------|-----------|
| 1 Quercus Wislizenii               | T            | NOL-        | 9                           |         |           |
| 2 Heteromeles arbutifulia          | S            | NOL         | 10                          |         |           |
| 3 CYHOSUFUL RChinodul              | H            | NOL         | 11                          |         |           |
| 4                                  |              |             | 12                          |         |           |
| 5                                  |              |             | 13                          |         |           |
| 6                                  |              |             | 14                          |         |           |
| 7                                  |              |             | 15                          |         |           |
| 8                                  |              |             | 16                          |         |           |
| Percent of Dominant Species that a | are OBL, FAC | W, or FAC ( | excluding FAC-) $0/3 = 0\%$ |         |           |
| Remarks<br>Criteria hot h          | net -        |             |                             |         |           |

#### HYDROLOGY

| <ul> <li>Recorded Data (Describe in Remarks)</li> <li>Stream, Lake, or Tide Gauge</li> <li>Aerial Photographs</li> <li>Other</li> </ul> |   | WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks |  |  |  |  |
|---|---|---|--|--|--|--|
| No Recorded Data Availab  | le  |   | Drift Lines  |  |  |  |
| FIELD OBSERVATIONS  |   | Drainage Patterns in Wetlands   |  |  |  |  |
| Depth of Surface Water  | Ø   | (in)  | Secondary Indicators (2 or more Required):         |  |  |  |
| Depth to Free Water in Pit $NA$ (in)  |   | Water-Stained Leaves Local Soil Survey Data   |  |  |  |  |
| Depth to Saturated Soil   | N/A   | (in)  | ☐ FAC-Neutral Test<br>☐ Other (Explain in Remarks) |  |  |  |
| Beginnings of chann   | Beginnings of channel formation; sorting of fines - |   |  |  |  |  |

| SOILS               |                    |                                 |                                   | to SI percent sl   | igii S7                                  |
|---------------------|--------------------|---------------------------------|-----------------------------------|--|--|
| Map Unit Name (S    | Series and Phase): | Exchequer very                  | rocky sill ham,                   | Drainage Class: 1  | cessively drained                        |
| Taxonomy (Subgroup) |                    |                                 |                                   | Confirm Mapped Type?   | YES NO                                   |
|                     |                    | PROFIL                          | E DESCRIPTION                     |  |  |
| Depth<br>(inches)   | Horizon            | Matrix Color<br>(Munsell Moist) | Mottle Colors<br>(Munsell Moist)  | Mottle<br>Abundance/Contrast   | Texture, Concretions,<br>Structure, etc. |
|                     |                    |                                 |                                   |  |  |
|                     |                    |                                 |                                   |  |  |
|                     |                    |                                 |                                   |  |  |
|                     |                    |                                 |                                   |  |  |
|                     |                    |                                 |                                   |  |  |
|                     |                    | HYDRIC                          | SOIL INDICATORS:                  |  |  |
| Reducing            |                    | rs                              | Organic<br>Listed or<br>Listed or | ions<br>ganic Content in Surface<br>Streaking in Sandy Soil<br>n Local Hydric Soils List<br>n National Hydric Soils L<br>Explain in Remarks) | S  |
| Remarks:            |                    | carated here.                   |                                   |  |  |

| Hydrophytic Vegetation Present? | YES | NO |  |     | 6        |
|---------------------------------|-----|----|--|-----|----------|
| Wetland Hydrology Present?      | YÉS | NO | Is this Sampling Point Within a Wetland? | YES | (NO)     |
| Hydric Soils Present?           | YES | NO |  |     | $\smile$ |
| Remarks                         |     |    | L  |     |          |

Site is at the head of an intermittent channel in the Zone of ephemeral flow.

DATA FORM - ROUTINE WETLAND DETERMINATION

### ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

| Project/Site Ione Casino Project                                      |        | Date       | 11/19/03             |
|---|--------|------------|----------------------|
| Applicant / Owner   |        | County     | Amador               |
| Investigator  |        | State      | CA                   |
| Do Normal Circumstances exist on the site?                            | YES NO | Communi    | ty ID                |
| Is the site significantly disturbed (Atypical Situation)?             | YES NO | Transect I | D Swale behind motel |
| Is the area a potential Problem Area? (If needed, explain on reverse) | YES NO | Plot ID    | 58                   |

#### VEGETATION

| Dominant Plant Species             | Stratum     | Indicator    | Dominant Plant Species      | Stratum | Indicator |
|------------------------------------|-------------|--------------|-----------------------------|---------|-----------|
| 1 Hemizonia fasciculata            | H           | NOL          | 9                           |         |           |
| 2 Eremocarpul Setigerul            | H           | NOL          | 10                          |         |           |
| 3                                  |             |              | 11                          |         |           |
| 4                                  |             |              | 12                          |         |           |
| 5                                  |             |              | 13                          |         |           |
| 6                                  |             |              | 14                          |         |           |
| 7                                  |             |              | 15                          |         |           |
| 8                                  |             |              | 16                          |         |           |
| Percent of Dominant Species that a | re OBL, FAC | W, or FAC (e | excluding FAC-) $0/2 = 0\%$ |         |           |
| Remarks<br>Criteria hot,           | met.        |              |                             |         |           |

#### HYDROLOGY

| Recorded Data (Describe in<br>Stream, Lake, or Tide G<br>Aerial Photographs<br>Other<br>No Recorded Data Availab<br>FIELD OBSERVA | e   |      | WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands |
|---|-----|------|---|
| Depth of Surface Water  | à   | (in) | Secondary Indicators (2 or more Required):  |
| Depth to Free Water in Pit  | >18 | (in) | Water-Stained Leaves  |
| Depth to Saturated Soil   | >18 | (in) | Generation FAC-Neutral Test   |

Criteria not met.

| Map Unit Name (S          | Series and Phase):  | Exchange and 1                  | Auburn loam, 3                                 | Drainage Class: (7)   | esterily drawn                          |  |  |
|---------------------------|---------------------|---------------------------------|--|---|---|--|--|
| Taxonomy (Subgr           |                     | erency in anaci                 | Field Observations Confirm Mapped Type? YES NO |   |   |  |  |
| PROF                      |                     |                                 |  |   |   |  |  |
| Depth<br>(inches)         | Horizon             | Matrix Color<br>(Munsell Moist) | Mottle Colors<br>(Munsèll Moist)               | Mottle<br>Abundance/Contrast  | Texture, Concretions<br>Structure, etc. |  |  |
| 0-14                      | A                   | 2.5Y 4/3                        | 10 YR 4/4                                      | 20% dull  | silt ham                                |  |  |
| 14-16                     | A                   | 2.57 4/3                        | NA   | holie   | Clay loom                               |  |  |
|                           |                     |                                 |  |   |   |  |  |
|                           |                     |                                 |  |   |   |  |  |
|                           |                     |                                 |  |   |   |  |  |
|                           |                     |                                 |  |   |   |  |  |
| ☐ Reducing<br>☐ Gleyed or | dor<br>sture Regime |                                 | ☐ Organic<br>☐ Listed or<br>☐ Listed or        | ons<br>ganic Content in Surface<br>Streaking in Sandy Soils<br>n Local Hydric Soils List<br>n National Hydric Soils L<br>xplain in Remarks) | 5                                       |  |  |
| Remarks:<br>CHIACH        | ia het met          | ¢.                              |  |   |   |  |  |

| Hydrophytic Vegetation Present? | YES NO |  |     |      |
|---------------------------------|--------|--|-----|------|
| Wetland Hydrology Present?      | YES NO | Is this Sampling Point Within a Wetland? | YES | (NO) |
| Hydric Soils Present?           | YES NO |  |     | 0    |
| Remarks                         |        |  |     |      |

Remarks

Criteria not met.

# ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

| Project/Site Ione Casino Project                                      |        | Date        | 11/19/03                    |
|---|--------|-------------|-----------------------------|
| Applicant / Owner   |        | County      | Amador                      |
| Investigator G.O. Graening, John Howe, John                           | Miller | State       | CA                          |
| Do Normal Circumstances exist on the site?                            |        | Community   | ID                          |
| Is the site significantly disturbed (Atypical Situation)?             | YES NO | Transect ID | Swale behind partel at dite |
| Is the area a potential Problem Area? (If needed, explain on reverse) | YES NO | Plot ID     | 59                          |

#### VEGETATION

| Dominant Plant Species             | Stratum     | Indicator    | Dominant Plant Species     | Stratum | Indicator |
|------------------------------------|-------------|--------------|----------------------------|---------|-----------|
| 1 Paspalum dilatatum               | H           | FAC          | 9                          |         |           |
| 2 Lythrum hyssopitolium            | Н           | FACW         | 10                         |         |           |
| 3 Cynodon dactylon                 | H           | FAC          | 11                         |         |           |
| 4                                  |             |              | 12                         |         |           |
| 5                                  |             |              | 13                         |         |           |
| 6                                  |             |              | 14                         |         |           |
| 7                                  |             |              | 15                         |         |           |
| 8                                  |             |              | 16                         |         |           |
| Percent of Dominant Species that a | re OBL, FAC | W, or FAC (e | excluding FAC-) 3/3 = 100% |         |           |
| Remarks                            |             |              |                            |         |           |
| Critchia met                       |             |              |                            |         |           |
|                                    |             |              |                            |         |           |
|                                    |             |              |                            |         |           |
|                                    |             |              |                            |         |           |

#### HYDROLOGY

| Recorded Data (Describe in<br>Stream, Lake, or Tide of<br>Aerial Photographs<br>Other | Gauge  |      | WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits |
|---|--------|------|---|
| FIELD OBSERV  | ATIONS |      | Drainage Patterns in Wetlands   |
| Depth of Surface Water  | Ø      | (in) | Secondary Indicators (2 or more Required):  |
| Depth to Free Water in Pit  | 78     | (in) | ☐ Water-Stained Leaves<br>☐ Local Soil Survey Data  |
| Depth to Saturated Soil   | >8     | (in) | ☐ FAC-Neutral Test<br>☐ Other (Explain in Remarks)  |

Slate bedrock near surface apparently causes seasonal ponding - Criteria mer.

| Map Unit Name (   | Series and Phase):         | Exchequer and A                 | where loam, 340                  | Drainage Class: 27(                              | exilially drained                       |  |
|-------------------|----------------------------|---------------------------------|----------------------------------|--|---|--|
| Taxonomy (Subg    |                            | openet and the                  |                                  | eservations Confirm Mapped Type? YES NO          |   |  |
|                   |                            | E DESCRIPTION                   |                                  |  |   |  |
| Depth<br>(inches) | Horizon                    | Matrix Color<br>(Munsell Moist) | Mottle Colors<br>(Munsell Moist) | Mottle<br>Abundance/Contrast                     | Texture, Concretions<br>Structure, etc. |  |
| 0-2               | A                          | 5Y 4/1                          | N/A                              | hone   | clay loom                               |  |
| 2-8               | B                          | 2.5 Y 4/2                       | 10 YR 4/4                        | 60°/ , dull                                      | Clay han                                |  |
|                   |                            |                                 |                                  |  |   |  |
|                   |                            | HYDRIC                          | SOIL INDICATORS:                 |  |   |  |
| Histosol          |                            |                                 | Concret                          |  |   |  |
|                   |                            |                                 | personal second                  | ganic Content in Surface                         |   |  |
| Sulfidic O        |                            |                                 | processing and the second        | Streaking in Sandy Soils                         |   |  |
|                   | sture Regime<br>Conditions |                                 |                                  | n Local Hydric Soils List                        |   |  |
|                   | Low-Chroma Colo            | re                              |                                  | n National Hydric Soils L<br>Explain in Remarks) | list                                    |  |
| Remarks:          |                            |                                 |                                  |  |   |  |
|                   | rock at 8"                 | depth-                          |                                  |  |   |  |
|                   | foria met.                 | Ŧ                               |                                  |  |   |  |

| Hydrophytic Vegetation Present? | (YES) NO  |  |          |
|---------------------------------|---|--|----------|
| Wetland Hydrology Present?      | YES NO  | Is this Sampling Point Within a Wetland? ( | YES) NO  |
| Hydric Soils Present?           | (YES) NO  |  | <u> </u> |
| Demarka                         | and the second se |  |          |

Remarks

Criteria met.

DATA FORM - ROUTINE WETLAND DETERMINATION

# ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

| Project/Site Ione Casino Project                                      |          | Date        | 11/19/03           |
|---|----------|-------------|--------------------|
| Applicant / Owner   |          | County      | Amador             |
| Investigator 6.0. Gracening, John Howe, John                          | Miller   | State       | CA                 |
| Do Normal Circumstances exist on the site?                            | (TES) NO | Community   |                    |
| Is the site significantly disturbed (Atypical Situation)?             | YES 10   | Transect ID | Ditch behind store |
| Is the area a potential Problem Area? (If needed, explain on reverse) | YES NO   | Plot ID     | SID                |

#### VEGETATION

| Dominant Plant Species             | Stratum     | Indicator         | Dominant Plant Species | Stratum | Indicator |
|------------------------------------|-------------|-------------------|------------------------|---------|-----------|
| 1 Rubus discolor                   | 5           | FACW ¥            | 9                      |         |           |
| 2 Paspalum dilutatum               | H           | FAC               | 10                     |         |           |
| 3 Cynodon dactylon                 | H           | FAC               | 11                     |         |           |
| 4                                  |             |                   | 12                     |         |           |
| 5                                  |             |                   | 13                     |         |           |
| 6                                  |             |                   | 14                     |         |           |
| 7                                  |             |                   | 15                     |         |           |
| 8                                  |             |                   | 16                     |         |           |
| Percent of Dominant Species that a | re OBL, FAC | W, or FAC (e      | xcluding FAC-) $3/3 =$ | 100%    |           |
| Remarks                            |             |                   | 0/0                    |         |           |
| Criteria met                       | *           |                   |                        |         |           |
|                                    |             |                   |                        |         |           |
|                                    |             |                   |                        |         |           |
|                                    |             | A COLUMN A COLUMN |                        |         |           |

#### HYDROLOGY

| <ul> <li>Recorded Data (Describe in Remarks)</li> <li>Stream, Lake, or Tide Gauge</li> <li>Aerial Photographs</li> <li>Other</li> <li>No Recorded Data Available</li> </ul> |        |      | WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits |
|---|--------|------|---|
| FIELD OBSERV  | ATIONS |      | Drainage Patterns in Wetlands   |
| Depth of Surface Water  | Ø      | (in) | Secondary Indicators (2 or more Required):  |
| Depth to Free Water in Pit  | >8     | (in) | <ul> <li>Water-Stained Leaves</li> <li>Local Soil Survey Data</li> </ul>  |
| Depth to Saturated Soil   | 6      | (in) | ☐ FAC-Neutral Test<br>☐ Other (Explain in Remarks)  |

Shallow slate bedrock creates a perched water table here. Criteria met

| OILS              |                     |                                 |   | 31 percent stopes -  | Sid                                     |
|-------------------|---------------------|---------------------------------|---|--|---|
|                   |                     | : Exchagner and A               |   | Drainage Class: Crac   |   |
| Taxonomy (Subgr   | oup)                |                                 | Field Observations                      | Confirm Mapped Type?   | YE'S NO                                 |
|                   |                     | PROFIL                          | E DESCRIPTION                           |  |   |
| Depth<br>(inches) | Horizon             | Matrix Color<br>(Munsell Moist) | Mottle Colors<br>(Munsell Moist)        | Mottle<br>Abundance/Contrast   | Texture, Concretions<br>Structure, etc. |
| 0-3               | A                   | 2.5 Y 4/1                       | 10YR 4/4                                | 30% dull   | clay loam                               |
| 3-8               | B                   | 2.5 4 4/1                       | 10 YR 4/4                               | 30%, dull  | Focky clay                              |
|                   |                     |                                 |   |  |   |
|                   |                     |                                 |   |  |   |
|                   |                     |                                 |   |  |   |
|                   |                     |                                 |   |  |   |
|                   |                     | HYDRIC                          | SOIL INDICATORS:                        |  | J                                       |
|                   | dor<br>sture Regime | ors                             | ☐ Organic<br>☐ Listed or<br>☐ Listed or | ons<br>ganic Content in Surface<br>Streaking in Sandy Soil<br>n Local Hydric Soils List<br>n National Hydric Soils L<br>xplain in Remarks) | S                                       |
| Remarks:<br>Críte | ria met.            | Slate bedroc                    | k encountered a                         | at 8" dep th.  |   |

| Hydrophytic Vegetation Present? | (YES) NO |   |
|---------------------------------|----------|---|
| Wetland Hydrology Present?      | (YES) NO | Is this Sampling Point Within a Wetland? (YES) NO |
| Hydric Soils Present?           | (YES) NO |   |
| Remarks                         |          | I   |

Remarks

Criteria met.

#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

| Project/Site Ione Casino Project   |      | Date 11/19/03                         |     |
|--|------|---------------------------------------|-----|
| Applicant / Owner  |      | County Amador                         |     |
| Investigator G.O. Gracning, John Howe, John Miller<br>Do Normal Circumstances exist on the site? (YES) |      | State C.A                             |     |
| Do Normal Circumstances exist on the site?   | ) NO | Community ID                          |     |
| Is the site significantly disturbed (Atypical Situation)? YES  | NO   | Transect ID Vernal Swake Wot landing. | st  |
| Is the area a potential Problem Area? (If needed, explain on reverse) YES                              | NO   | Plot ID SII                           | 511 |

# VEGETATION

| Dominant Plant Species             | Stratum     | Indicator    | Dominant Plant Species    | Stratum | Indicator |
|------------------------------------|-------------|--------------|---------------------------|---------|-----------|
| 1 Eleocharis Macrostachya          | Н           | OBL          | 9                         |         |           |
| 2                                  |             |              | 10                        |         |           |
| 3                                  |             |              | 11                        |         |           |
| 4                                  |             |              | 12                        |         |           |
| 5                                  |             |              | 13                        |         |           |
| 6                                  |             |              | 14                        |         |           |
| 7                                  |             |              | 15                        |         |           |
| 8                                  |             |              | 16                        |         |           |
| Percent of Dominant Species that a | re OBL, FAC | W, or FAC (e | excluding FAC-) 1/1 = 100 | 76      |           |
| Remarks<br>Criteria met            | ÷           |              |                           |         |           |

| Recorded Data (Describe i<br>Stream, Lake, or Tide<br>Aerial Photographs<br>Other | Gauge                              | WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits |
|---|------------------------------------|---|
| FIELD OBSERV  | ATIONS                             | Drainage Patterns in Wetlands   |
| Depth of Surface Water  | Ø (in)                             | Secondary Indicators (2 or more Required):  |
| Depth to Free Water in Pit  | >16 (in)                           | Water-Stained Leaves  |
| Depth to Saturated Soil   | >/6 (in)                           | ☐ FAC-Neutral Test<br>☐ Other (Explain in Remarks)  |
| Vernal Swale has b<br>Seasonal pondi  | een blocked by ol<br>ng - Crifersa | Id landing strip fill, which causes met.  |

| viab Unit Name (S  | eries and Phase)  | : Exchequer and A               | alun han 21  | Drainage Class: 0N  | constal, drawl                          |
|--|---|---------------------------------|--|---|---|
| Faxonomy (Subgro   |   | · Chiney Chir Unice Ti          | /  | S Confirm Mapped Type   | <u>cessively drained</u><br>? YES NO    |
|  |   | PROFIL                          |  | · · · · · · · · · · · · · · · · · · ·   | . 120 110                               |
| Depth<br>(inches)  | Horizon   | Matrix Color<br>(Munsell Moist) | Mottle Colors<br>(Munsell Moist)                                     | Mottle<br>Abundance/Contrast  | Texture, Concretions<br>Structure, etc. |
| 0-2  | A   | 2.54 4/2                        |  | 10% faint   | clay loan                               |
| 2-16   | B   | 2.54 4/3                        |  |   | clay loam                               |
|  |   |                                 |  |   |   |
|  |   |                                 |  |   |   |
|  |   |                                 | SOIL INDICATORS:   |   |   |
| Reducing C<br>Gleyed or L<br>Remarks:                          | or<br>ture Regime<br>Conditions<br>Low-Chroma Cold<br>Low-Chroma Cold |                                 | □ Organic<br>□ Listed o<br>□ Listed o<br>□ Other (E<br>Stil Thelicat | ganic Content in Surfac<br>Streaking in Sandy Soi<br>n Local Hydric Soils Lis<br>n National Hydric Soils<br>Explain in Remarks) | ls<br>t<br>List                         |
| ETLAND DETE  |   |                                 | 1  |   |   |
| Hydrophytic Vegeta<br>Vetland Hydrology<br>Hydric Soils Preser | Present?  | YES NO<br>YES NO                | Is this Sampling P   | oint Within a Wetland?  | YES NO                                  |
|  |   |                                 |  |   |   |
| Remarks  | s feature   | is a mon-h                      | made, arti   | ficial pond ,   | with                                    |

DATA FORM - ROUTINE WETLAND DETERMINATION

#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

| Project/Site Ione Casino Project                                      |          | Date 11/19/03                            |
|---|----------|--|
| Applicant / Owner   |          | County Amador                            |
| Investigator G.O. Graening, John Howe, John                           | Miller   | State CA                                 |
| Do Normal Circumstances exist on the site?                            | (YES) NO | Community ID                             |
| Is the site significantly disturbed (Atypical Situation)?             | YES NO   | Transect ID Vernal Swale at Send of land |
| Is the area a potential Problem Area? (If needed, explain on reverse) | YES NO   | Plot ID S12 5                            |

# VEGETATION

| Dominant Plant Species   | Stratum      | Indicator    | Dominant Plant Species    | Stratum | Indicator |
|--|--------------|--------------|---------------------------|---------|-----------|
| 1 Eryngium Castrense   | H            | FACW         | 9                         |         |           |
| <sup>1</sup> Eryngium Castrense<br><sup>2</sup> Agrostis Stolonitera | H            | FACW         | 10                        |         |           |
| 3  |              |              | 11                        |         |           |
| 4  |              |              | 12                        |         |           |
| 5  |              |              | 13                        |         |           |
| 6  |              |              | 14                        |         |           |
| 7  |              |              | 15                        |         |           |
| 8  |              |              | 16                        |         |           |
| Percent of Dominant Species that a                                   | are OBL, FAC | W, or FAC (e | excluding FAC-) $2/2 = 1$ | 00%     |           |
| Remarks<br>CHHCHÍA Met   | ,            |              |                           |         |           |

| Recorded Data (Describe in Remarks)  Stream, Lake, or Tide Gauge  Aerial Photographs Other  No Recorded Data Available  FIELD OBSERVATIONS |               |      | WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits |
|--|---------------|------|---|
|  | ~             |      |   |
| Depth of Surface Water   | Ø             | (in) | Secondary Indicators (2 or more Required):  |
| Depth to Free Water in Pit   | > 14          | (in) | Water-Stained Leaves  |
| Depth to Saturated Soil  | >14           | (in) | ☐ FAC-Neutral Test<br>☐ Other (Explain in Remarks)  |
| Vernal Swale has be  | in blocked by | old  | landing strip fill which causes   |
| Seasonal ponding .   | 7             |      | J /   |

| OILS               |                   |                                 |                                       | 31 percent slopes -  | 512                                     |
|--------------------|-------------------|---------------------------------|---------------------------------------|--|---|
| Map Unit Name (S   | eries and Phase): | Exchequir and t                 | Auburn loan, 3te                      | Drainage Class: $e_{\chi_{C}}$   | essionly drained                        |
| Taxonomy (Subgro   | oup)              | ŀ                               | Field Observations                    | Confirm Mapped Type?   | 1                                       |
|                    |                   | PROFIL                          | LE DESCRIPTION                        |  |   |
| Depth<br>(inches)  | Horizon           | Matrix Color<br>(Munsell Moist) | Mottle Colors<br>(Munsell Moist)      | Mottle<br>Abundance/Contrast   | Texture, Concretions<br>Structure, etc. |
| 0-14               | A                 | 2.545/3                         | 10 YR 4/4                             | 40%, dull  | Clay luan                               |
|                    |                   |                                 |                                       |  |   |
|                    |                   |                                 |                                       |  |   |
|                    |                   |                                 |                                       |  |   |
|                    |                   |                                 |                                       |  |   |
| _                  |                   | HYDRIC                          | SOIL INDICATORS:                      |  |   |
|                    | or<br>ture Regime | s                               | ☐ Organic<br>☐ Listed o<br>☐ Listed o | ions<br>ganic Content in Surface<br>Streaking in Sandy Soil<br>n Local Hydric Soils List<br>n National Hydric Soils L<br>Explain in Remarks) | S                                       |
| Remarks:<br>Críter | ia hot me         | 4.                              |                                       |  |   |

| Hydrophytic Vegetation Present? | (YES) NO  |   |
|---------------------------------|-----------|---|
| Wetland Hydrology Present?      | VES NO    | Is this Sampling Point Within a Wetland? YES (NO) |
| Hydric Soils Present?           | YES (NO)  |   |
| Remarks<br>Site is a u          | lemal Swa | le at its head.                                   |

# ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

| Project/Site Ione Casino Project                                      |          | Date        | 11/19/0      | 3              |
|---|----------|-------------|--------------|----------------|
| Applicant / Owner   |          | County      | Amador       |                |
| Investigator G.O. Graening , John Howe, John                          | Miller   | State       | CA           |                |
| Do Normal Circumstances exist on the site?                            | (YES) NO | Community   | ID           |                |
| Is the site significantly disturbed (Atypical Situation)?             | YES NO   | Transect ID | Vernal Swele | E of landing s |
| Is the area a potential Problem Area? (If needed, explain on reverse) | YES NO   | Plot ID     | TIPI-        | 527            |

# VEGETATION

| Dominant Plant Species                          | Stratum     | Indicator    | Dominant Plant Species    | Stratum | Indicator |
|---|-------------|--------------|---------------------------|---------|-----------|
| 1 Eleocharis Macrostachya                       | Н           | OBL          | 9                         |         |           |
| 2 Eryngium Castrense                            | H           | FACW         | 10                        |         |           |
| 2 Eryngium Castrense<br>3 Eremocurpus setigerus | Н           | NOL          | 11                        |         |           |
| 4   |             |              | 12                        |         |           |
| 5   |             |              | 13                        |         |           |
| 6   |             |              | 14                        |         |           |
| 7   |             |              | 15                        |         |           |
| 8   |             |              | 16                        | ,       |           |
| Percent of Dominant Species that a              | re OBL, FAC | W, or FAC (e | excluding FAC-) $2/3 = 6$ | 57%     |           |
| Remarks<br>Criteria met                         | v           |              |                           |         |           |

| <ul> <li>Recorded Data (Describe in I</li> <li>Stream, Lake, or Tide Ga</li> <li>Aerial Photographs</li> </ul> |             |        | WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches |
|--|-------------|--------|---|
| L Other  |             |        | Water Marks   |
| No Recorded Data Available   |             |        | Sediment Deposits   |
| FIELD OBSERVAT   | FIONS       |        | Drainage Patterns in Wetlands   |
| Depth of Surface Water   | Ø           | (in)   | Secondary Indicators (2 or more Required):  |
| Depth to Free Water in Pit   | >6          | (in)   | Water-Stained Leaves  |
| Depth to Saturated Soil  | >6          | (in)   | ☐ FAC-Neutral Test<br>☐ Other (Explain in Remarks)                                      |
| Shallow bedrock cre<br>Criteria met  | ater Condit | ions t | that lead to the seasonal ponding of wate   |

| SOILS             |                  |                                 |                                  | 31 percent slopes            | . TIPI                                   |
|-------------------|------------------|---------------------------------|----------------------------------|------------------------------|--|
| Map Unit Name (S  | eries and Phase) | Exchequer and 1                 | Auburn loon, 3 to                | Drainage Class: () (         | essively drained                         |
| Taxonomy (Subgro  |                  | l                               |                                  | Confirm Mapped Type?         |  |
|                   |                  | PROFIL                          | E DESCRIPTION                    |                              |  |
| Depth<br>(inches) | Horizon          | Matrix Color<br>(Munsell Moist) | Mottle Colors<br>(Munsell Moist) | Mottle<br>Abundance/Contrast | Texture, Concretions,<br>Structure, etc. |
| 0-6               | A                | 2.57 5/3                        | 2.5Y 5/6                         | 10%, bright                  | clay loom                                |
|                   |                  |                                 |                                  |                              |  |
|                   |                  |                                 |                                  |                              |  |
|                   |                  |                                 |                                  |                              |  |
|                   |                  |                                 |                                  |                              |  |
|                   |                  | HYDRIC                          | SOIL INDICATORS:                 |                              |  |
| Histosol          |                  |                                 | Concreti                         | ons                          |  |
| Histic Epip       | bedon            |                                 | High Org                         | ganic Content in Surface     | e Layer in Sandy Soils                   |
| Sulfidic O        |                  |                                 |                                  | Streaking in Sandy Soil      |  |
|                   | sture Regime     |                                 |                                  | n Local Hydric Soils List    |  |
|                   | Conditions       |                                 |                                  | n National Hydric Soils I    | List                                     |
| Gleyed or         | Low-Chroma Col   | ors                             | └┘ Other (E                      | xplain in Remarks)           |  |
| Remarks:          |                  |                                 |                                  |                              |  |
| Criter            | ia hot me-       | t.                              |                                  |                              |  |
|                   | 1 1 1            | en l'artes                      | 11. and                          | 5 in Land                    |  |
| Jar               | e bedrock        | IS at or ne                     | ar the ground                    | over that a                  |  |
|                   |                  |                                 |                                  |                              |  |

| Hydrophytic Vegetation Present? | (YES) NO    |                            |                | $\sim$   |
|---------------------------------|-------------|----------------------------|----------------|----------|
| Wetland Hydrology Present?      | (YES) NO I  | s this Sampling Point With | nin a Wetland? | YES (NO) |
| Hydric Soils Present?           | YES (NO)    |                            |                | 0        |
| Remarks                         |             |                            |                |          |
| Site is                         | a vernal sw | ale.                       |                |          |
|                                 |             |                            |                |          |
|                                 |             |                            |                |          |
|                                 |             |                            |                |          |
|                                 |             |                            |                |          |
|                                 |             |                            |                |          |
|                                 |             |                            |                |          |

# ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

| Project/Site Ione Casino Project                                      | a particular ing high an ing tag an ing tag and the second of the second second second second second second sec | Date     | 11/19/03                   |
|---|---|----------|----------------------------|
| Applicant / Owner   |   | County   | Amador                     |
| Investigator G.O. Giraening, John Howe, John                          | Miller  | State    | CA                         |
| Do Normal Circumstances exist on the site?                            | YES NO  | Communi  | ity ID                     |
| Is the site significantly disturbed (Atypical Situation)?             | YES NO  | Transect | ID Vernal swale Eotlanding |
| Is the area a potential Problem Area? (If needed, explain on reverse) | YES NO  | Plot ID  | FIPZ 528                   |

#### VEGETATION

| Dominant Plant Species             | Stratum     | Indicator    | Dominant Plant Species   | Stratum | Indicator |
|------------------------------------|-------------|--------------|--------------------------|---------|-----------|
| 1 Hemizonia fasciculata            | H           | NOL          | 9                        |         |           |
| 2 Vulpia myutos                    | H           | FACU*        | 10                       |         |           |
| 3                                  |             |              | 11                       |         |           |
| 4                                  |             |              | 12                       |         |           |
| 5                                  |             |              | 13                       |         |           |
| 6                                  |             |              | 14                       |         |           |
| 7                                  |             |              | 15                       |         |           |
| 8                                  |             | 1            | 16                       |         |           |
| Percent of Dominant Species that a | re OBL, FAC | W, or FAC (e | xcluding FAC-) $D/2 = 0$ | 1/1     |           |
| Remarks<br>Criteria not m          | et .        | 2            |                          |         |           |

# HYDROLOGY

| Recorded Data (Describe in<br>Stream, Lake, or Tide of<br>Aerial Photographs<br>Other | Gauge | WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits |  |  |  |  |
|---|-------|---|--|--|--|--|
| FIELD OBSERVATIONS  |       |   | Drainage Patterns in Wetlands  |  |  |  |
| Depth of Surface Water  | Ø     | (in)  | Secondary Indicators (2 or more Required):                               |  |  |  |
| Depth to Free Water in Pit  | 78    | (in)  | <ul> <li>Water-Stained Leaves</li> <li>Local Soil Survey Data</li> </ul> |  |  |  |
| Depth to Saturated Soil   | 78    | (in)  | ☐ FAC-Neutral Test<br>☐ Other (Explain in Remarks)                       |  |  |  |

No indicators apparent.

| SOILS               |                     |                        |          | -  | te 31 pircent slipes   | TIP2                                     |  |  |
|---------------------|---------------------|------------------------|----------|--|--|--|--|--|
| Map Unit Name (S    | eries and Phase): ( | Exchequer              | . Chel A | uburn loan ,3                                  | Drainage Class: @n.t   | essively drained                         |  |  |
| Taxonomy (Subgro    |                     | 0                      |          | Field Observations Confirm Mapped Type? YES NO |  |  |  |  |
|                     |                     |                        | PROFILE  | E DESCRIPTION                                  |  |  |  |  |
| Depth<br>(inches)   | Horizon             | Matrix C<br>(Munsell I |          | Mottle Colors<br>(Munsell Moist)               | Mottle<br>Abundance/Contrast   | Texture, Concretions,<br>Structure, etc. |  |  |
| 0-8                 | A                   | 2.57 :                 | 5/4      | N/A  | hone   | elay loom                                |  |  |
|                     |                     |                        |          |  |  |  |  |  |
|                     |                     |                        |          |  |  |  |  |  |
|                     |                     |                        |          |  |  |  |  |  |
|                     |                     |                        |          |  |  |  |  |  |
|                     |                     |                        |          |  |  |  |  |  |
|                     |                     | H                      | YDRIC S  | OIL INDICATORS:                                |  | 1  |  |  |
|                     | lor<br>sture Regime | 5                      |          | Organic  Listed of Listed of                   | ions<br>ganic Content in Surface<br>Streaking in Sandy Soil<br>n Local Hydric Soils List<br>n National Hydric Soils I<br>Explain in Remarks) | S  |  |  |
| Remarks:<br>C + iHe | chia hot met        | S                      | late     | bedrock is                                     | near the grow  | nd surface.                              |  |  |
|                     | COMINIATION         |                        |          |  |  |  |  |  |
| WETLAND DET         |                     | YES                    | NO)      |  |  | -  |  |  |
| Wetland Hydrolog    |                     | YES                    | 60       | Is this Sampling P                             | oint Within a Wetland?   | YES NO                                   |  |  |

Hydric Soils Present? Remarks

Criteria not met.

YES NO

DATA FORM - ROUTINE WETLAND DETERMINATION

#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

| Project/Site Ione Casino Project                                      |          | Date        | 11/19/03                |
|---|----------|-------------|-------------------------|
| Applicant / Owner   |          | County      | Amador                  |
| Investigator G.O. Graening John Howe, John                            | Miller   | State       | CA                      |
| Do Normal Circumstances exist on the site?                            | (YES) NO | Community   | ID                      |
| Is the site significantly disturbed (Atypical Situation)?             | YES NO   | Transect ID | Vernal Swale Not landin |
| Is the area a potential Problem Area? (If needed, explain on reverse) | YES NO   | Plot ID     | S13 57                  |

# VEGETATION

| Dominant Plant Species             | Stratum     | Indicator    | Dominant Plant Species | Stratum | Indicator |
|------------------------------------|-------------|--------------|------------------------|---------|-----------|
| 1 Etyngium Castrense               | H           | FACW         | 9                      |         |           |
| 2 Lythrum hyssopifolium            | Н           | FACW         | 10                     |         |           |
| 3 Hemizonia fasciculada            | H           | NOL          | 11                     |         |           |
| 4 Vulpia myuros                    | 14          | FACUX        | 12                     |         |           |
| 5                                  |             |              | 13                     |         |           |
| 6                                  |             |              | 14                     |         |           |
| 7                                  |             |              | 15                     |         |           |
| 8                                  |             |              | 16                     |         |           |
| Percent of Dominant Species that a | re OBL, FAC | W, or FAC (e | xcluding FAC-) $2/4 =$ | 50%     |           |
| Remarks                            |             |              |                        |         |           |
| Criteria 1                         | hadmat      |              |                        |         |           |
| Criteria                           | TOT MET.    | ~            |                        |         |           |
|                                    |             |              |                        |         |           |
|                                    |             |              |                        |         |           |

# HYDROLOGY

| Recorded Data (Describe in Remarks)     Stream, Lake, or Tide Gauge     Aerial Photographs     Other     No Recorded Data Available |     |      | WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits |  |  |
|---|-----|------|---|--|--|
| FIELD OBSERVATIONS  |     |      | Drainage Patterns in Wetlands   |  |  |
| Depth of Surface Water  | Ø   | (in) | Secondary Indicators (2 or more Required):  |  |  |
| Depth to Free Water in Pit  | >10 | (in) | Water-Stained Leaves  |  |  |
| Depth to Saturated Soil   | >10 | (in) | <ul><li>FAC-Neutral Test</li><li>Other (Explain in Remarks)</li></ul>   |  |  |

Criteria not met.

| OILS              |                     | × 4 A                           | 1 1 01                                | 31 percent stoper  |  |
|-------------------|---------------------|---------------------------------|---------------------------------------|--|--|
|                   |                     | Exchequer and A                 |                                       |  |  |
| Taxonomy (Subgro  | oup)                | <i>v</i>                        | Field Observations                    | Confirm Mapped Type?   | YES NO                                 |
|                   |                     | PROFIL                          | E DESCRIPTION                         |  |  |
| Depth<br>(inches) | Horizon             | Matrix Color<br>(Munsell Moist) | Mottle Colors<br>(Munsell Moist)      | Mottle<br>Abundance/Contrast   | Texture, Concretion<br>Structure, etc. |
| 0-8               | A                   | 2.5 Y 5/4                       | N/A                                   | hone   | Sandy learn                            |
| 8-10              | B                   | 2.54 4/4                        | N/A                                   | nune   | Clay loam                              |
|                   |                     |                                 |                                       |  |  |
|                   |                     |                                 |                                       |  |  |
|                   |                     |                                 |                                       |  |  |
|                   |                     |                                 |                                       |  |  |
|                   |                     | HYDRIC                          | SOIL INDICATORS:                      |  |  |
|                   | dor<br>sture Regime | ors                             | ☐ Organic<br>☐ Listed o<br>☐ Listed o | ions<br>ganic Content in Surface<br>Streaking in Sandy Soil<br>n Local Hydric Soils List<br>n National Hydric Soils L<br>Explain in Remarks) | S                                      |
| Remarks:<br>Crite | ria hot m           | e7 -                            |                                       |  |  |

| Hydrophytic Vegetation Present?<br>Wetland Hydrology Present? | YES (NO) | Is this Sampling Point Within a Wetland? | YES | (NO)       |
|---|----------|--|-----|------------|
| Hydric Soils Present?   | YES (NO) |  |     | $\bigcirc$ |

Criteria not met -

#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

| Project/Site Ione Casino Project                                      |         | Date     | 11/19/03                     |
|---|---------|----------|------------------------------|
| Applicant / Owner   |         | County   | Amador                       |
| Investigator 6.0. Graening, John Howe, John                           | Miller  | State    | CA                           |
| Do Normal Circumstances exist on the site?                            | (YES NO | Commur   | hity ID                      |
| Is the site significantly disturbed (Atypical Situation)?             | YES NO  | Transect | 10 Vernal poil E of Huy . 49 |
| Is the area a potential Problem Area? (If needed, explain on reverse) | YES NO  | Plot ID  | 514                          |

# VEGETATION

| Dominant Plant Species                            | Stratum     | Indicator    | Dominant Plant Species      | Stratum | Indicator |
|---|-------------|--------------|-----------------------------|---------|-----------|
| 1 Eleocharis Macro Hachna                         | H           | OBL          | 9                           |         |           |
| 1 Eleocharis Macrostachyo<br>2 Etyngium Castiense | 14          | FACW         | 10                          |         |           |
| 3   |             |              | 11                          |         |           |
| 4   |             |              | 12                          |         |           |
| 5   |             |              | 13                          |         |           |
| 6   |             |              | 14                          |         |           |
| 7   |             |              | 15                          |         |           |
| 8   |             |              | 16                          |         |           |
| Percent of Dominant Species that a                | re OBL, FAC | W, or FAC (e | excluding FAC-) $2/2 = 100$ | 10      |           |
| Remarks<br>Criteria met.                          |             |              |                             |         |           |

| Recorded Data (Describe in<br>Stream, Lake, or Tide<br>Aerial Photographs<br>Other<br>No Recorded Data Availat<br>FIELD OBSERV | Gauge         |      | WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands |
|--|---------------|------|---|
| Depth of Surface Water   | ø             | (in) | Secondary Indicators (2 or more Required):  |
| Depth to Free Water in Pit   | >8            | (in) | <ul> <li>Water-Stained Leaves</li> <li>Local Soil Survey Data</li> </ul>  |
| Depth to Saturated Soil  | 78            | (in) | FAC-Neutral Test<br>KOther (Explain in Remarks) algal model   |
| Shallow bedrock.   | facilitates t | hes  | easonal ponding of water - Criteria. Me   |

| Map Unit Name (S  | eries and Phase): ( | Exchediner and                        | Auburn loan, 3                        | Drainage Class: 0x0  | essively drained                        |
|-------------------|---------------------|---------------------------------------|---------------------------------------|--|---|
| Taxonomy (Subgro  |                     | C C C C C C C C C C C C C C C C C C C |                                       | Confirm Mapped Type?   |   |
|                   |                     | PROFIL                                | E DESCRIPTION                         |  |   |
| Depth<br>(inches) | Horizon             | Matrix Color<br>(Munsell Moist)       | Mottle Colors<br>(Munsell Moist)      | Mottle<br>Abundance/Contrast   | Texture, Concretions<br>Structure, etc. |
| 0-8               | A                   | 2.5Y 4/3                              | N/A                                   | hone   | clay loam                               |
|                   |                     |                                       |                                       |  |   |
|                   |                     |                                       |                                       |  |   |
|                   | . 19                |                                       |                                       |  |   |
|                   |                     | HYDRIC                                | SOIL INDICATORS:                      |  |   |
|                   | lor<br>sture Regime | 5                                     | ☐ Organic<br>☐ Listed o<br>☐ Listed o | ions<br>ganic Content in Surface<br>Streaking in Sandy Soil<br>n Local Hydric Soils List<br>n National Hydric Soils L<br>Explain in Remarks) | S                                       |
| Remarks:          | lería not me        | .+.                                   | 2<br>                                 |  |   |
| Sla               | te bedrock          | is hear sur                           | fac                                   |  |   |

| Hydrophytic Vegetation Present? | (TES) NO |   |  |
|---------------------------------|----------|---|--|
| Wetland Hydrology Present?      | (YES) NO | Is this Sampling Point Within a Wetland? YES (NO) |  |
| Hydric Soils Present?           | YES NO   |   |  |
| Site is a                       | vernal D | 100/-   |  |
|                                 | J        |   |  |
|                                 |          |   |  |
|                                 |          |   |  |
|                                 |          |   |  |

#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

| Project/Site Ione Casino Project                                      |              | Date 11/19/03                |
|---|--------------|------------------------------|
| Applicant / Owner   |              | County Amador                |
| Investigator 6.0. Graching, John Howe, John M                         | iller        | State CA                     |
| Do Normal Circumstances exist on the site?                            | Community ID |                              |
| Is the site significantly disturbed (Atypical Situation)?             | YES NO       | Transect ID North Stick pond |
| Is the area a potential Problem Area? (If needed, explain on reverse) | YES NO       | Plot ID 515                  |

#### VEGETATION

| Dominant Plant Species             | Stratum     | Indicator    | Dominant Plant Species                 | Stratum | Indicator |
|------------------------------------|-------------|--------------|--|---------|-----------|
| 1 Eleocharis macrostachya          | H           | OBL          | 9                                      |         |           |
| 2                                  |             |              | 10                                     |         |           |
| 3                                  |             |              | 11                                     |         |           |
| 4                                  |             |              | 12                                     |         |           |
| 5                                  |             |              | 13                                     |         |           |
| 6                                  |             |              | 14                                     |         |           |
| 7                                  |             |              | 15                                     |         |           |
| 8                                  |             |              | 16                                     |         |           |
| Percent of Dominant Species that a | re OBL, FAC | W, or FAC (e | excluding FAC-) $ /  = /60$            | 1%      |           |
| Remarks                            |             |              | ······································ |         |           |
| Criteria met.                      |             |              |  |         |           |
|                                    |             |              |  |         |           |
|                                    |             |              |  |         |           |

# HYDROLOGY

| <ul> <li>Recorded Data (Describe in Remarks)</li> <li>Stream, Lake, or Tide Gauge</li> <li>Aerial Photographs</li> <li>Other</li> </ul> |            | WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated # 100 ft from \$15 Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits |
|---|------------|--|
| FIELD OBSERVATIONS  |            | Drainage Patterns in Wetlands  |
| Depth of Surface Water  | 12. * (in) | Secondary Indicators (2 or more Required):   |
| Depth to Free Water in Pit 712 (in)   |            | Water-Stained Leaves   |
| Depth to Saturated Soil $> 12$ (in)   |            | ☐ FAC-Neutral Test<br>☐ Other (Explain in Remarks)   |

Criteria met.

| Map Unit Name (S  | eries and Phase):   | Exchequer and                   | Auburn loom, 3                        | Drainage Class: Crx (  | essively drained                        |
|-------------------|---------------------|---------------------------------|---------------------------------------|--|---|
| Faxonomy (Subgro  |                     | ţ.                              |                                       | Confirm Mapped Type?   |   |
|                   |                     | PROFIL                          | E DESCRIPTION                         |  |   |
| Depth<br>(inches) | Horizon             | Matrix Color<br>(Munsell Moist) | Mottle Colors<br>(Munsell Moist)      | Mottle<br>Abundance/Contrast   | Texture, Concretions<br>Structure, etc. |
| 0-12              | A                   | 2.54 5/4                        | 2.54 4/4                              | faint  | clay loom                               |
|                   |                     |                                 |                                       |  |   |
|                   |                     |                                 |                                       |  |   |
|                   |                     |                                 |                                       |  |   |
|                   |                     |                                 |                                       |  |   |
|                   | L                   | HYDRIC                          | SOIL INDICATORS:                      |  |   |
|                   | lor<br>sture Regime | c                               | ☐ Organic<br>☐ Listed o<br>☐ Listed o | ions<br>ganic Content in Surface<br>Streaking in Sandy Soil<br>n Local Hydric Soils List<br>n National Hydric Soils L<br>Explain in Remarks) | S                                       |
| Remarks:          | Heria hot m         | **                              |                                       |  |   |

| Hydrophytic Vegetation Present? | (YES) NO |   |
|---------------------------------|----------|---|
| Wetland Hydrology Present?      |          | Is this Sampling Point Within a Wetland? YES (NO) |
| Hydric Soils Present?           | YES NO   |   |
| Remarks                         |          | 1   |
| This is a                       | stock po | nd with hydrophytic vegetation.                   |
|                                 |          |   |
|                                 |          |   |

# ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

| Project/Site Ione Casino Project                                      |          | Date       | 11/19/03              |
|---|----------|------------|-----------------------|
| Applicant / Owner   |          | County     | Amador                |
| Investigator G.O. Graching, John Howe, John                           | Miller   | State      | CA                    |
| Do Normal Circumstances exist on the site?                            | (YES) NO | Communit   | -                     |
| Is the site significantly disturbed (Atypical Situation)?             | YES NO   | Transect I | D Seep at base of dam |
| Is the area a potential Problem Area? (If needed, explain on reverse) | YES NO   | Plot ID    | 516                   |

# VEGETATION

| Dominant Plant Species             | Stratum     | Indicator    | Dominant Plant Species      | Stratum | Indicator |
|------------------------------------|-------------|--------------|-----------------------------|---------|-----------|
| 1 Elescharis Macrostochya.         | H           | OBL          | 9                           |         |           |
| 2 Juncus balticus                  | H           | OBL          | 10                          |         |           |
| 3 Mentha pulegiam                  | Н           | DBL_         | 11                          |         |           |
| 4                                  |             |              | 12                          |         |           |
| 5                                  |             |              | 13                          |         |           |
| 6                                  |             |              | 14                          |         |           |
| 7                                  |             |              | 15                          |         |           |
| 8                                  |             |              | 16                          |         |           |
| Percent of Dominant Species that a | re OBL, FAC | W, or FAC (e | excluding FAC-) $3/3 = 100$ | %       |           |
| Remarks<br>Críteria Met.           |             |              |                             |         |           |

| <ul> <li>Recorded Data (Describe i</li> <li>Stream, Lake, or Tide</li> <li>Aerial Photographs</li> <li>Other</li> </ul> |                   | WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines |
|---|-------------------|---|
| No Recorded Data Availat  | ble               | Sediment Deposits   |
| FIELD OBSERVATIONS  |                   | Drainage Patterns in Wetlands   |
| Depth of Surface Water  | Ø (in)            | Secondary Indicators (2 or more Required):  |
| Depth to Free Water in Pit 712 (in)   |                   | Water-Stained Leaves  |
| Depth to Saturated Soil   | >12 (in)          | ☐ FAC-Neutral Test<br>☐ Other (Explain in Remarks)  |
| OBL Speciel Sugge   | st that hydrology | is present at other times in the year   |

| SOILS             |                   |                                 |                                  | 31 percent slopes  | 516                                      |
|-------------------|-------------------|---------------------------------|----------------------------------|--|--|
| Map Unit Name (S  | eries and Phase): | Exchequir and Al                | uburn loam, 3+0                  | Drainage Class: 070  | estively drained                         |
| Taxonomy (Subgro  |                   | V                               |                                  | Confirm Mapped Type?   | YES NO                                   |
|                   |                   | PROFIL                          | E DESCRIPTION                    |  |  |
| Depth<br>(inches) | Horizon           | Matrix Color<br>(Munsell Moist) | Mottle Colors<br>(Munsell Moist) | Mottle<br>Abundance/Contrast   | Texture, Concretions,<br>Structure, etc. |
| 0-12              | A                 | 2.54 5/4                        | NIA                              | hone   | clay loam                                |
|                   |                   |                                 |                                  |  |  |
|                   |                   |                                 |                                  |  |  |
|                   |                   |                                 |                                  |  |  |
|                   |                   |                                 |                                  |  |  |
|                   |                   | HYDRIC                          | SOIL INDICATORS:                 |  |  |
|                   |                   | ors                             | Organic Listed of Listed of      | ions<br>ganic Content in Surface<br>Streaking in Sandy Soil<br>n Local Hydric Soils List<br>n National Hydric Soils I<br>Explain in Remarks) | S  |
| Remarks:          | ería not me       | t. Slate 1                      | bedrock is t                     | ound 1-foot b  | elow the                                 |
| 91                | -ound level-      |                                 |                                  |  |  |

| Hydrophytic Vegetation Present?                       | (YES) NO                             | 0   |
|---|--------------------------------------|---|
| Wetland Hydrology Present?                            | (YES) NO                             | Is this Sampling Point Within a Wetland? YES (NO)             |
| Hydric Soils Present?                                 | YES NO                               |   |
| OBL Species<br>Present, however,<br>A recent Origin - | e indicate<br>the lack<br>for this s | that forcing hydrology is<br>of hydric sails suggest<br>seep. |

#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

| Project/Site Ione Casino Project                                      |          | Date        | 11/25/03            |
|---|----------|-------------|---------------------|
| Applicant / Owner   |          | County      | Amador              |
| Investigator John Howe, John Miller                                   |          | State       | ĊA                  |
| Do Normal Circumstances exist on the site?                            | (YES) NO | Communit    | y ID                |
| Is the site significantly disturbed (Atypical Situation)?             | YES NO   | Transect II | DNWTHIG DryCr. NNEG |
| Is the area a potential Problem Area? (If needed, explain on reverse) | YES NO   | Plot ID     | 517                 |

#### VEGETATION

| Dominant Plant Species             | Stratum     | Indicator    | Dominant Plant Species     | Stratum | Indicator |
|------------------------------------|-------------|--------------|----------------------------|---------|-----------|
| 1 Aesculus californica             | S           | NOL          | 9                          |         |           |
| 2 Claytonia parviflora             | H           | FAC          | 10                         |         |           |
| 3                                  |             |              | 11                         |         |           |
| 4                                  |             |              | 12                         |         |           |
| 5                                  |             |              | 13                         |         |           |
| 6                                  |             |              | 14                         |         |           |
| 7                                  |             |              | 15                         |         |           |
| 8                                  |             |              | 16                         |         |           |
| Percent of Dominant Species that a | re OBL, FAC | W, or FAC (e | excluding FAC-) $1/2 = 50$ | %       |           |
| Remarks<br>Crítería hot            | met.        |              |                            |         |           |

| Recorded Data (Describe in     Stream, Lake, or Tide (     Aerial Photographs     Other     No Recorded Data Availab     FIELD OBSERV. | Gauge          |      | WETLAND HYDROLOGY INDICATORS Primary Indicators:  Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands |
|--|----------------|------|--|
| Depth of Surface Water   | Ø              | (in) | Secondary Indicators (2 or more Required):   |
| Depth to Free Water in Pit   | N/A            | (in) | Water-Stained Leaves   |
| Depth to Saturated Soil  | N/A            | (in) | General Test Other (Explain in Remarks)  |
| Rounded edges of si  | late tragments | in   | streambed indicates flow -   |

| Map Unit Name (S    | Series and Phase):  | Exchange very i                 | ocky sill ham,                                 | Drainage Class: exe  | U Contraction of the second se |  |  |
|---------------------|---------------------|---------------------------------|--|--|--|--|--|
| Taxonomy (Subgroup) |                     |                                 | Field Observations Confirm Mapped Type? YES NO |  |  |  |  |
|                     |                     | PROFIL                          | E DESCRIPTION                                  |  |  |  |  |
| Depth<br>(inches)   | Horizon             | Matrix Color<br>(Munsell Moist) | Mottle Colors<br>(Munsell Moist)               | Mottle<br>Abundance/Contrast   | Texture, Concretions<br>Structure, etc.  |  |  |
|                     |                     |                                 |  |  |  |  |  |
|                     |                     |                                 |  |  |  |  |  |
|                     |                     | 10                              |  |  |  |  |  |
|                     |                     |                                 |  |  |  |  |  |
|                     |                     |                                 |  |  |  |  |  |
| Reducing            | dor<br>sture Regime |                                 | ☐ Organic<br>☐ Listed or<br>☐ Listed or        | ons<br>ganic Content in Surface<br>Streaking in Sandy Soil<br>n Local Hydric Soils List<br>n National Hydric Soils L<br>xplain in Remarks) | S  |  |  |
| Remarks:            | lo pit was          | excavaled he                    | ie .   |  |  |  |  |

| Hydrophytic Vegetation Present? | YES NO   |   |
|---------------------------------|----------|---|
| Wetland Hydrology Present?      | (YES) NO | Is this Sampling Point Within a Wetland? YES NO |
| Hydric Soils Present?           | YES NO   |   |
| Remarks                         |          |   |
|                                 |          | ent channel.                                    |
|                                 |          |   |
|                                 |          |   |
|                                 |          |   |
|                                 |          |   |
|                                 |          |   |

#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

| Project/Site Ione Casino Project                                      |          | Date 11/25/03                         |
|---|----------|---------------------------------------|
| Applicant / Owner   |          | County Amador                         |
| Investigator John Howe, John Miller                                   |          | State CA                              |
| Do Normal Circumstances exist on the site?                            | (YES) NO | Community ID                          |
| Is the site significantly disturbed (Atypical Situation)?             | YES NO   | Transect ID NW Trib Dry Cr. Main ster |
| Is the area a potential Problem Area? (If needed, explain on reverse) | YES NO   | Plot ID 518                           |

### VEGETATION

| Dominant Plant Species             | Stratum     | Indicator    | Dominant Plant Species    | Stratum | Indicator |
|------------------------------------|-------------|--------------|---------------------------|---------|-----------|
| 1 Aesculus californica             | S           | NOL          | 9                         |         |           |
| 2 Carduus pychocephalus            | H           | NOL          | 10                        |         |           |
| 3 Claytonia parvillora             | H           | FAC          | 11                        |         |           |
| 4 Bromus Carinatus                 | H           | NOL          | 12                        |         |           |
| 5 Avena fatua                      | H           | NOL          | 13                        |         |           |
| 6 Anthrising caucalis              | H           | NOL          | 14                        |         |           |
| 7                                  |             |              | 15                        |         |           |
| 8                                  |             |              | 16                        |         |           |
| Percent of Dominant Species that a | re OBL, FAC | W, or FAC (e | excluding FAC-) $1/6 = 1$ | 7%      |           |
| Remarks                            |             |              |                           |         |           |
| Criteria                           | but met     | l            |                           |         |           |
| UFITCHA                            | rio i frici | 5            |                           |         |           |
|                                    |             |              |                           |         |           |
|                                    |             |              |                           |         |           |

| <ul> <li>☐ Recorded Data (Describe in</li> <li>☐ Stream, Lake, or Tide Ga</li> <li>☐ Aerial Photographs</li> <li>☐ Other</li> </ul> | auge             | WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits |
|---|------------------|---|
| FIELD OBSERVA   | TIONS            | ☐ Drainage Patterns in Wetlands   |
| Depth of Surface Water  | Ø (in)           | Secondary Indicators (2 or more Required):  |
| Depth to Free Water in Pit  | N/A (in)         | Water-Stained Leaves  |
| Depth to Saturated Soil   | N/A (in)         | FAC-Neutral Test<br>Cother (Explain in Remarks)   |
| Rounded edges of slate  | - fragments in s | treambed indicates flow.  |

| Map Unit Name (   | Series and Phase): | Sycheaner Herei                 | Arky silt han                                  | Lo SI percent slope<br>Drainage Class: ex   |  |  |  |
|---|--------------------|---------------------------------|--|---|--|--|--|
| Map Unit Name (Series and Phase): Exchequer very<br>Taxonomy (Subgroup) |                    | Actiques bery                   | Field Observations Confirm Mapped Type? YES NO |   |  |  |  |
|   |                    | PROFIL                          |  |   |  |  |  |
| Depth Horizon<br>(inches)   |                    | Matrix Color<br>(Munsell Moist) | Mottle Colors<br>(Munsell Moist)               | Mottle<br>Abundance/Contrast  | Texture, Concretions,<br>Structure, etc. |  |  |
|   |                    |                                 |  |   |  |  |  |
|   |                    |                                 |  |   |  |  |  |
|   |                    |                                 |  |   |  |  |  |
|   |                    |                                 |  |   |  |  |  |
|   | 2                  |                                 |  |   |  |  |  |
|   |                    | HYDRIC                          | SOIL INDICATORS:                               | 1   | L  |  |  |
|   |                    |                                 | Organic<br>Listed of                           | ions<br>ganic Content in Surface<br>Streaking in Sandy Soil<br>n Local Hydric Soils List<br>n National Hydric Soils I | S  |  |  |
| _   | r Low-Chroma Color | S                               |  | Explain in Remarks)   |  |  |  |
| Remarks:  | o pit was          | excavatel her                   | ۹ ر  |   |  |  |  |

| Hydrophytic Vegetation Present? | YES NO      |  | 0        |
|---------------------------------|-------------|--|----------|
| Wetland Hydrology Present?      | (YES) NO    | Is this Sampling Point Within a Wetland? | YES (NO) |
| Hydric Soils Present?           | YES NO      |  | <u> </u> |
| Remarks                         |             | 4  |          |
| Site is on                      | indermidden | nt Chappils                              |          |

DATA FORM - ROUTINE WETLAND DETERMINATION

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#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

| Project/Site Jone Casino Project                                      |        | Date        | 11/25/03           |
|---|--------|-------------|--------------------|
| Applicant / Owner   |        | County      | Amador             |
| Investigator John Howe, John Mil                                      | ler    | State       | CA                 |
| Do Normal Circumstances exist on the site?                            | YES NO | Community   | y ID               |
| Is the site significantly disturbed (Atypical Situation)?             | YES NO | Transect IE | NWTHIBDAYCH. NESWA |
| Is the area a potential Problem Area? (If needed, explain on reverse) | YES NO | Plot ID     | 519                |

### VEGETATION

| Dominant Plant Species             | Stratum      | Indicator     | Dominant Plant Species    | Stratum | Indicator |  |
|------------------------------------|--------------|---------------|---------------------------|---------|-----------|--|
| 1 Avena fatua                      | H            | NOL           | 9                         |         |           |  |
| 2 Taeniatherum Caput-medus         | a H          | NOL           | 10                        |         |           |  |
| 3 Vulpia myuroL                    | H            | FACU*         | 11                        |         |           |  |
| 4                                  |              |               | 12                        |         |           |  |
| 5                                  |              |               | 13                        |         |           |  |
| 6                                  |              |               | 14                        |         |           |  |
| 7                                  |              |               | 15                        |         |           |  |
| 8                                  |              |               | 16                        |         |           |  |
| Percent of Dominant Species that a | are OBL, FAC | CW, or FAC (e | excluding FAC-) $0/3 = 0$ | 18      |           |  |
| Remarks<br>Criteria not met -      |              |               |                           |         |           |  |

| Recorded Data (Describe in Reman     Stream, Lake, or Tide Gauge     Aerial Photographs     Other     No Recorded Data Available     FIELD OBSERVATIONS |      |      | WETLAND HYDROLOGY INDICATORS Primary Indicators:  Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands |
|---|------|------|--|
| Depth of Surface Water  | Ø    | (in) | Secondary Indicators (2 or more Required):   |
| Depth to Free Water in Pit  | N/A  | (in) | Water-Stained Leaves   |
| Depth to Saturated Soil   | N/A  | (in) | ☐ FAC-Neutral Test<br>☐ Other (Explain in Remarks)   |
| No indicators appare  | ent. |      |  |

| soils leams, 31 to 51 percent slopes 510   |                    |                                 |                                  |                              |  |  |
|--|--------------------|---------------------------------|----------------------------------|------------------------------|--|--|
| Map Unit Name (S   | Series and Phase): | Exchequir and A                 | uburn very ricky                 | Drainage Class: 2xc          | essively drained                         |  |
| Taxonomy (Subgr  |                    | V                               |                                  | Confirm Mapped Type?         |  |  |
|  |                    | PROFIL                          | E DESCRIPTION                    |                              |  |  |
| Depth<br>(inches)  | Horizon            | Matrix Color<br>(Munsell Moist) | Mottle Colors<br>(Munsell Moist) | Mottle<br>Abundance/Contrast | Texture, Concretions,<br>Structure, etc. |  |
|  |                    |                                 |                                  |                              |  |  |
|  |                    |                                 |                                  |                              |  |  |
|  |                    |                                 |                                  |                              |  |  |
|  |                    |                                 |                                  |                              |  |  |
|  |                    |                                 |                                  |                              |  |  |
|  |                    |                                 |                                  |                              |  |  |
|  |                    | HYDRIC                          | SOIL INDICATORS:                 | 1                            | I  |  |
| Histosol       Concretions         Histic Epipedon       High Organic Content in Surface Layer in Sandy S         Sulfidic Odor       Organic Streaking in Sandy Soils         Aquic Moisture Regime       Listed on Local Hydric Soils List         Reducing Conditions       Listed on National Hydric Soils List         Gleyed or Low-Chroma Colors       Other (Explain in Remarks) |                    |                                 |                                  |                              |  |  |
| Remarks:<br>N d  | pit was e          | excavaled here                  | ×                                |                              |  |  |

| Hydrophytic Vegetation Present?     YES     NO       Wetland Hydrology Present?     YES     NO |             |   |
|--|-------------|---|
|  |             | Is this Sampling Point Within a Wetland? YES (NO) |
| Hydric Soils Present?  | YES (NO)    |   |
| Remarks  |             |   |
| No ind   | icators app | arent -   |
|  |             |   |

#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project Casino Lone Project/Site Date 25/03 Applicant / Owner County nador John John Miller Investigator State Howe (YES) NO Do Normal Circumstances exist on the site? Community ID Transect ID NW Trib Dry Cr. ENE Gram Is the site significantly disturbed (Atypical Situation)? YES NO, 520 Is the area a potential Problem Area? (If needed, explain on reverse) YES Plot ID (NO

#### VEGETATION

| Dominant Plant Species             | Stratum     | Indicator    | Dominant Plant Species    | Stratum | Indicator |  |
|------------------------------------|-------------|--------------|---------------------------|---------|-----------|--|
| 1 Pinus sabiniana                  |             | NOL          | 9                         |         |           |  |
| 2 Carduns pychocephalus            | H           | NOL          | 10                        |         |           |  |
| 3 Taenietherum Caput-medusae       | H           | NOL          | 11                        |         |           |  |
| 4 CYNOSURUL ECHINATUL              | H           | NOL          | 12                        |         |           |  |
| 5 Vulpia myutos                    | H           | FACU*        | 13                        |         |           |  |
| 6 / /                              |             |              | 14                        |         |           |  |
| 7                                  |             |              | 15                        |         |           |  |
| 8                                  |             |              | 16                        |         |           |  |
| Percent of Dominant Species that a | re OBL, FAC | W, or FAC (e | excluding FAC-) $D/5 = 0$ | 0%      |           |  |
| Remarks                            |             |              | 0/                        |         |           |  |
| Criteria not met.                  |             |              |                           |         |           |  |
|                                    |             |              |                           |         |           |  |
|                                    |             |              |                           |         |           |  |

| Recorded Data (Describe in Remarks)      Stream, Lake, or Tide Gauge     Aerial Photographs     Other      No Recorded Data Available      FIELD OBSERVATIONS |            |      | WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands |
|---|------------|------|---|
| Depth of Surface Water  | ø          | (in) | Secondary Indicators (2 or more Required):  |
| Depth to Free Water in Pit  | N/A        | (in) | Water-Stained Leaves  |
| Depth to Saturated Soil N/A (in)  |            |      | ☐ FAC-Neutral Test<br>☐ Other (Explain in Remarks)  |
| Incision and sortin   | g of fines | Sha  | ggests ephemeral flow.  |

| soils loams, 31 to SI pinet stops S20  |   |                                 |                                  |                              |  |  |  |  |
|--|---|---------------------------------|----------------------------------|------------------------------|--|--|--|--|
| Map Unit Name (S   | Map Unit Name (Series and Phase): Exchequer and Auburn Very rocky Drainage Class: excessionly drained |                                 |                                  |                              |  |  |  |  |
| Taxonomy (Subgroup)  |   |                                 |                                  | Confirm Mapped Type?         |  |  |  |  |
|  |   | PROFIL                          | E DESCRIPTION                    | 10                           |  |  |  |  |
| Depth<br>(inches)  | Horizon   | Matrix Color<br>(Munsell Moist) | Mottle Colors<br>(Munsell Moist) | Mottle<br>Abundance/Contrast | Texture, Concretions,<br>Structure, etc. |  |  |  |
|  |   |                                 |                                  |                              |  |  |  |  |
|  |   |                                 |                                  |                              |  |  |  |  |
|  |   |                                 |                                  |                              |  |  |  |  |
|  |   |                                 |                                  |                              |  |  |  |  |
|  |   |                                 |                                  |                              |  |  |  |  |
|  | -   |                                 |                                  |                              |  |  |  |  |
| HYDRIC SOIL INDICATORS:         Histosol       Concretions         Histic Epipedon       High Organic Content in Surface Layer in Sandy Soils         Sulfidic Odor       Organic Streaking in Sandy Soils         Aquic Moisture Regime       Listed on Local Hydric Soils List         Reducing Conditions       Listed on National Hydric Soils List         Gleyed or Low-Chroma Colors       Other (Explain in Remarks) |   |                                 |                                  |                              |  |  |  |  |
| Remarks:<br>No   | pit was e   | x caualed here                  | *                                |                              |  |  |  |  |

| Hydrophytic Vegetation Present?              | YES NO                  | 0   |
|--|-------------------------|---|
| Wetland Hydrology Present?                   | (YES) NO                | Is this Sampling Point Within a Wetland? YES (NO) |
| Hydric Soils Present?                        | YES NO                  |   |
| Remarks<br>Site is at<br>OF hear the Zone o- | the upper<br>f ephemera | end of an intermittent drainage at 1 flow.        |

# ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

| Project/Site Ione Casino Project                                      |        | Date 11/25/03                     |
|---|--------|-----------------------------------|
| Applicant / Owner   |        | County Amador                     |
| Investigator John Howe, John Miller                                   |        | State CA                          |
| Do Normal Circumstances exist on the site?                            | ES NO  | Community ID                      |
| Is the site significantly disturbed (Atypical Situation)?             | YES NO | Transect ID NW Dry Cr. Trik NE br |
| Is the area a potential Problem Area? (If needed, explain on reverse) | YES NO | Plot ID SZ1                       |

## VEGETATION

| Dominant Plant Species             | Stratum     | Indicator    | Dominant Plant Species    | Stratum | Indicator |
|------------------------------------|-------------|--------------|---------------------------|---------|-----------|
| 1 Aesculus californica             | S           | NOL          | 9                         |         |           |
| 2 Toxico dendron diversilibum      | S           | NOL.         | 10                        |         |           |
| 3 Cynosurus echinatus              | Н           | NOL          | 11                        |         |           |
| 4 Trifolium angustifolium          | H           | NOL          | 12                        |         |           |
| 5 Avena Fatur                      | 1-1         | NOL          | 13                        |         |           |
| 6                                  |             |              | 14                        |         |           |
| 7                                  |             |              | 15                        |         |           |
| 8                                  |             |              | 16                        |         |           |
| Percent of Dominant Species that a | re OBL, FAC | W, or FAC (e | excluding FAC-) $0/5 = 0$ | >%      |           |
| Remarks<br>Chitetia n              | of met.     |              |                           |         |           |
| Of Hand In                         |             |              |                           |         |           |
|                                    |             |              |                           |         |           |
|                                    |             |              |                           |         |           |

| Recorded Data (Describe i<br>Stream, Lake, or Tide<br>Aerial Photographs<br>Other<br>No Recorded Data Availat<br>FIELD OBSERV | Gauge<br>ble  |      | WETLAND HYDROLOGY INDICATORS Primary Indicators:  Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands |
|---|---------------|------|--|
| Depth of Surface Water  | ø             | (in) | Secondary Indicators (2 or more Required):   |
| Depth to Free Water in Pit  | NA            | (in) | Water-Stained Leaves   |
| Depth to Saturated Soil $N/A$ (in)  |               |      | FAC-Neutral Test<br>Other (Explain in Remarks)   |
| Rounded fragments   | of slate in H | hes  | streambed indicates flow.  |

| Map Unit Name (S  | Series and Phase): | Fychanna ingine in              |                                   | Drainage Class: Cxcd  | CLASSING STREET, STREE |
|---|--------------------|---------------------------------|-----------------------------------|---|--|
| Map Unit Name (Series and Phase): Exchagure very neky silling<br>Taxonomy (Subgroup) Field Observ |                    |                                 | //                                | Confirm Mapped Type?  | PYES NO  |
|   |                    | PROFIL                          |                                   |   |  |
| Depth<br>(inches)   | Horizon            | Matrix Color<br>(Munsell Moist) | Mottle Colors<br>(Munsell Moist)  | Mottle<br>Abundance/Contrast  | Texture, Concretions<br>Structure, etc.  |
|   |                    |                                 |                                   |   |  |
|   |                    |                                 |                                   |   |  |
|   |                    |                                 |                                   |   |  |
|   |                    |                                 |                                   |   |  |
|   |                    |                                 |                                   |   |  |
|   |                    |                                 |                                   |   |  |
|   |                    | HYDRIC                          | SOIL INDICATORS:                  |   |  |
|   |                    | ors                             | Organic<br>Listed or<br>Listed or | ons<br>ganic Content in Surface<br>Streaking in Sandy Soils<br>n Local Hydric Soils List<br>n National Hydric Soils L<br>xplain in Remarks) | S  |
| Remarks:<br>N d   | pit was t          | excounted here.                 | 94                                |   |  |

| Hydrophytic Vegetation Present? | YES (NO)    |   |
|---------------------------------|-------------|---|
| Wetland Hydrology Present?      | (TES NO     | Is this Sampling Point Within a Wetland? YES (NO) |
| Hydric Soils Present?           | YES (NO)    |   |
| Site is an                      | internitten | tly-flowing channel.                              |

#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

| Project/Site Ione Casino Project                                      | 1997 tal 1996 Million Anna (Albana and Alba) ta anna | Date 11/25/03                  |
|---|--|--------------------------------|
| Applicant / Owner   |  | County Amador                  |
| Investigator John Howe, John Miller                                   |  | State CA                       |
| Do Normal Circumstances exist on the site?                            | (YES) NO   | Community ID                   |
| Is the site significantly disturbed (Atypical Situation)?             | YES NO   | Transect ID Central Stock pond |
| Is the area a potential Problem Area? (If needed, explain on reverse) | YES NO   | Plot ID SZZ                    |

#### VEGETATION

| Dominant Plant Species             | Stratum      | Indicator    | Dominant Plant Species | Stratum | Indicator |
|------------------------------------|--------------|--------------|------------------------|---------|-----------|
| 1 Juncus balficus                  | H            | OBL.         | 9                      |         |           |
| 2                                  |              |              | 10                     |         |           |
| 3                                  |              |              | 11                     |         |           |
| 4                                  |              |              | 12                     |         |           |
| 5                                  |              |              | 13                     |         |           |
| 6                                  |              |              | 14                     |         |           |
| 7                                  |              |              | 15                     |         |           |
| 8                                  |              |              | 16                     |         |           |
| Percent of Dominant Species that a | are OBL, FAC | W, or FAC (e | excluding FAC-)        | 100%    | L         |
| Remarks<br>Criteria n              | ne-t.        |              | 1/ 1                   | 1 10    |           |

| <ul> <li>Recorded Data (Describe)</li> <li>Stream, Lake, or Tide</li> <li>Aerial Photographs</li> <li>Other</li> </ul> | 1.4          |        | WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks |
|--|--------------|--------|---|
| FIELD OBSERVATIONS   |              |        | <ul> <li>Drift Lines</li> <li>Sediment Deposits</li> <li>Drainage Patterns in Wetlands</li> </ul>   |
| Depth of Surface Water   | Ø            | (in)   | Secondary Indicators (2 or more Required):  |
| Depth to Free Water in Pit   | 74           | (in)   | Water-Stained Leaves  |
| Depth to Saturated Soil  | 74           | (in)   | ☐ FAC-Neutral Test<br>☐ Other (Explain in Remarks)  |
| Stock pond excau   | ated to slat | te bea | drock which traps water; tank is a  |

| Map Unit Name (S    | Series and Phase): ( | Exchance and Au                 | Lum leams, 3to                    | Drainage Class: 040   | essively drained                        |
|---------------------|----------------------|---------------------------------|-----------------------------------|---|---|
| Taxonomy (Subgroup) |                      |                                 |                                   | Confirm Mapped Type?  | /                                       |
|                     |                      | PROFIL                          | E DESCRIPTION                     |   |   |
| Depth<br>(inches)   | Horizon              | Matrix Color<br>(Munsell Moist) | Mottle Colors<br>(Munsell Moist)  | Mottle<br>Abundance/Contrast  | Texture, Concretions<br>Structure, etc. |
| 0-4                 | B                    | 5Y4/2_                          | NA                                | nohe  | clay loam                               |
|                     |                      |                                 |                                   |   |   |
|                     |                      |                                 |                                   |   |   |
|                     |                      |                                 |                                   |   |   |
|                     |                      | HYDRIC S                        | SOIL INDICATORS:                  |   |   |
|                     |                      | S                               | Organic<br>Listed or<br>Listed or | ons<br>ganic Content in Surface<br>Streaking in Sandy Soils<br>n Local Hydric Soils List<br>n National Hydric Soils L<br>xplain in Remarks) | S                                       |
| Remarks:<br>Sla     | ate bedrock          | near or at                      | surface.                          |   |   |
| Cr                  | Heria hot y          | met.                            |                                   |   |   |

| Hydrophytic Vegetation Present? | (YES) NO | ~   |
|---------------------------------|----------|---|
| Wetland Hydrology Present?      | (YES) NO | Is this Sampling Point Within a Wetland? YES (NO) |
| Hydric Soils Present?           | YES NO   |   |
| Site is a                       | 2 Man-m  | ade stock watering pond.                          |
|                                 |          |   |

DATA FORM - ROUTINE WETLAND DETERMINATION

#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

| Project/Site Ione Casino Piroject                                     |        | Date       | 11/25/03                 |
|---|--------|------------|--------------------------|
| Applicant / Owner   |        | County     | Amador                   |
| Investigator John Howe, John Miller                                   |        | State      | CA                       |
| Do Normal Circumstances exist on the site?                            | YES NO | Communit   | *                        |
| Is the site significantly disturbed (Atypical Situation)?             | YES NO | Transect I | Ditch at detention poind |
| Is the area a potential Problem Area? (If needed, explain on reverse) | YES NO | Plot ID    | 523                      |

# VEGETATION

| Dominant Plant Species             | Stratum      | Indicator    | Dominant Plant Species    | Stratum | Indicator |
|------------------------------------|--------------|--------------|---------------------------|---------|-----------|
| 1 Populus fremontii                | S            | FACW         | 9                         |         |           |
| 2 Rubus discolor                   | 5            | FACW*        | 10                        |         |           |
| 3 Typha latifolia                  | H            | OBL          | 11                        |         |           |
| 4                                  |              |              | 12                        |         |           |
| 5                                  |              |              | 13                        |         |           |
| 6                                  |              |              | 14                        |         |           |
| 7                                  |              |              | 15                        |         |           |
| 8                                  |              |              | 16                        |         |           |
| Percent of Dominant Species that a | are OBL, FAC | W, or FAC (e | excluding FAC-) $3/3 = 1$ | 00%     |           |
| Remarks<br>Criteria n              | net.         |              |                           |         |           |

#### HYDROLOGY

| <ul> <li>Recorded Data (Describe in</li> <li>Stream, Lake, or Tide (</li> <li>Aerial Photographs</li> <li>Other</li> </ul> | Sauge  | WETLAND HYDROLOGY INDICATORS<br>Primary Indicators:<br>Inundated<br>Saturated in Upper 12 Inches<br>Water Marks<br>Drift Lines<br>Sediment Deposits |
|--|--------|---|
| FIELD OBSERV   | ATIONS | , Drainage Patterns in Wetlands   |
| Depth of Surface Water (in)  |        | ) Secondary Indicators (2 or more Required):  |
| Depth to Free Water in Pit (in)  |        | Local Soil Survey Data  |
| Depth to Saturated Soil  | 2 (1   | n) FAC-Neutral Test Other (Explain in Remarks)  |
| 0.1  |        | ,   |

Criteria met -

| SOILS               |                      |                                 | 31   | perant slopes.               | S23                                      |  |  |
|---------------------|----------------------|---------------------------------|--|------------------------------|--|--|--|
| Map Unit Name (S    | Series and Phase): ( | Excheginer and Au               | Lurn lorms, 3to                                | Drainage Class: 0x (         | essively drained                         |  |  |
| Taxonomy (Subgroup) |                      |                                 | Field Observations Confirm Mapped Type? YES NO |                              |  |  |  |
|                     |                      | PROFIL                          | E DESCRIPTION                                  |                              |  |  |  |
| Depth<br>(inches)   | Horizon              | Matrix Color<br>(Munsell Moist) | Mottle Colors<br>(Munsell Moist)               | Mottle<br>Abundance/Contrast | Texture, Concretions,<br>Structure, etc. |  |  |
| 0-16                | A                    | 5Y 4/1                          | N/A  | hobe                         | Silly send with                          |  |  |
|                     |                      |                                 |  |                              | foreign plastic                          |  |  |
|                     |                      |                                 |  |                              | debris                                   |  |  |
|                     |                      |                                 |  |                              |  |  |  |
|                     |                      |                                 |  |                              |  |  |  |
|                     |                      | •                               |  |                              |  |  |  |
|                     |                      |                                 |  |                              |  |  |  |
|                     |                      |                                 |  |                              |  |  |  |
|                     |                      | HYDRIC                          | SOIL INDICATORS:                               |                              |  |  |  |
| Histosol            |                      |                                 | Concreti                                       | ons                          |  |  |  |
| Histic Epip         | edon                 |                                 | High Org                                       | anic Content in Surface      | Layer in Sandy Soils                     |  |  |
| Sulfidic Oc         | lor                  |                                 | protocol (                                     | Streaking in Sandy Soils     |  |  |  |
| *                   | sture Regime         |                                 | Listed on Local Hydric Soils List              |                              |  |  |  |
| Reducing            |                      |                                 | Listed or                                      | n National Hydric Soils L    | .ist                                     |  |  |
|                     | Low-Chroma Color     | S                               | U Other (E                                     | xplain in Remarks)           |  |  |  |
| Remarks:<br>CHH     | ería met.            |                                 |  |                              |  |  |  |
|                     |                      |                                 |  |                              |  |  |  |

| Hydrophytic Vegetation Present? | (YES) NO                        |   |
|---------------------------------|---------------------------------|---|
| Wetland Hydrology Present?      | (YES) NO                        | Is this Sampling Point Within a Wetland? (YES) NO |
| Hydric Soils Present?           | (YES) NO                        |   |
| Remarks                         |                                 |   |
|                                 |                                 |   |
|                                 |                                 |   |
|                                 | Criteria                        | a hart  |
|                                 | $(\mathcal{F})$ $(\mathcal{F})$ | ~ //// ·  |
|                                 |                                 |   |
|                                 |                                 |   |
|                                 |                                 |   |
|                                 |                                 |   |
|                                 |                                 |   |
|                                 |                                 |   |
|                                 |                                 |   |
|                                 |                                 |   |
|                                 |                                 |   |

# ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

| Project/Site Ione Casino Project                                      |          | Date 11/25/03                      |
|---|----------|------------------------------------|
| Applicant / Owner   |          | County Amador                      |
| Investigator John Howe, John Miller                                   |          | State CA                           |
| Do Normal Circumstances exist on the site?                            | (YES) NO | Community ID                       |
| Is the site significantly disturbed (Atypical Situation)?             | YES NO   | Transect ID Ditch in front of mode |
| Is the area a potential Problem Area? (If needed, explain on reverse) | YES NO   | Plot ID 524                        |

### VEGETATION

| Dominant Plant Species             | Stratum     | Indicator    | Dominant Plant Species  | Stratum | Indicator |
|------------------------------------|-------------|--------------|-------------------------|---------|-----------|
| 1 Salix lasiolepis                 | S           | FACW         | 9                       |         |           |
| 2 Typha latifolia                  | H           | OBL          | 10                      |         |           |
| 3 Epilibium ciliatum               | H           | FACW         | 11                      |         |           |
| 4 Cyperus eragnistis               | H           | FACW         | 12                      |         |           |
| 5 Cynodon dactulon                 | 1-1         | FAC          | 13                      |         |           |
| 6                                  |             |              | 14                      |         |           |
| 7                                  |             |              | 15                      |         |           |
| 8                                  |             |              | 16                      |         |           |
| Percent of Dominant Species that a | re OBL, FAC | W, or FAC (e | excluding FAC-) 5/5 =/0 | 0%      |           |
| Remarks<br>Críteria i              | met.        |              |                         |         |           |

# HYDROLOGY

| <ul> <li>Recorded Data (Describe in Re</li> <li>Stream, Lake, or Tide Gauge</li> <li>Aerial Photographs</li> <li>Other</li> <li>No Recorded Data Available</li> </ul> | je |      | WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits |
|---|----|------|---|
| FIELD OBSERVATIO  | NS |      | Drainage Patterns in Wetlands   |
| Depth of Surface Water  | ø  | (in) | Secondary Indicators (2 or more Required):  |
| Depth to Free Water in Pit  | 4  | (in) | Water-Stained Leaves  |
| Depth to Saturated Soil   | Ø  | (in) | ☐ FAC-Neutral Test<br>☐ Other (Explain in Remarks)  |
|   |    |      |   |

Criteria met.

| 1ap Unit Name (   | Series and Phase             | : Exchequer = Aut | un / 10me, 3-3.                  | Drainage Class: Pxc          | curively drained  |
|-------------------|------------------------------|-------------------|----------------------------------|------------------------------|---|
| axonomy (Subg     |                              | 1000              |                                  | Confirm Mapped Type?         | the second se |
|                   |                              | PROFIL            | E DESCRIPTION                    |                              |   |
| Depth<br>(inches) |                              |                   | Mottle Colors<br>(Munsell Moist) | Mottle<br>Abundance/Contrast | Texture, Concretions<br>Structure, etc.   |
| 0-8               | A                            | 2.54 4/3          | N/A                              | hone.                        | silty sand  |
|                   |                              | mixed with        |                                  |                              | /   |
|                   |                              | 5Y 4/1            |                                  |                              | sildy clay  |
|                   |                              |                   |                                  |                              |   |
|                   |                              |                   |                                  |                              |   |
|                   |                              |                   |                                  |                              |   |
|                   |                              |                   |                                  |                              |   |
|                   |                              | HYDRIC            | SOIL INDICATORS:                 |                              | 1   |
| Histosol          |                              |                   | Concret                          | ions                         |   |
| Histic Epi        |                              |                   |                                  | ganic Content in Surface     |   |
| Sulfidic O        |                              |                   |                                  | Streaking in Sandy Soil      |   |
|                   | isture Regime                |                   |                                  | n Local Hydric Soils List    |   |
|                   | Conditions<br>Low-Chroma Col |                   |                                  | n National Hydric Soils L    | List  |
|                   | Low-Chroma Cor               | 015               |                                  | Explain in Remarks)          |   |
| lemarks:          | , / ,                        | , 1               |                                  |                              |   |
| DIAT              | te bedroci                   | k near base       | of ditch.                        |                              |   |
|                   |                              |                   |                                  |                              |   |
|                   |                              |                   |                                  |                              |   |

| Hydrophytic Vegetation Present? | YES NO    |   |
|---------------------------------|-----------|---|
| Wetland Hydrology Present?      | YES NO    | Is this Sampling Point Within a Wetland? (YES) NO |
| Hydric Soils Present?           | (YES) NO  |   |
| Remarks                         |           | 1   |
|                                 |           |   |
| 0.1                             | eria met. |   |
| CLIT                            | etia met. |   |
|                                 |           |   |
|                                 |           |   |
|                                 |           |   |
|                                 |           |   |
|                                 |           |   |
|                                 |           |   |

#### DAIAFURM

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#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

| Project/Site Ione Casine Project                                      | a a a a a a a a a a a a a a a a a a a |    | Date 1/16/04                          |
|---|---------------------------------------|----|---------------------------------------|
| Applicant / Owner   |                                       |    | County Amador                         |
| Investigator Paul García, John Miller                                 |                                       |    | State CA                              |
| Do Normal Circumstances exist on the site?                            | (YES)                                 | NO | Community ID                          |
| Is the site significantly disturbed (Atypical Situation)?             | YES                                   |    | Transect ID Stock paral head Dij Ci-T |
| Is the area a potential Problem Area? (If needed, explain on reverse) | YES (                                 | NO | Plot ID S25                           |

#### VEGETATION

| Dominant Plant Species             | Stratum      | Indicator    | Dominant Plant Species      | Stratum | Indicator |
|------------------------------------|--------------|--------------|-----------------------------|---------|-----------|
| 1 Typha latitulia                  | H            | OBL          | 9                           |         |           |
| 2 Junear ballieus                  | H            | OBL          | 10                          |         |           |
| 3 Cyperus chagrostis               | H            | FACW         | 11                          |         |           |
| 4                                  |              |              | 12                          |         |           |
| 5                                  |              |              | 13                          |         |           |
| 6                                  |              |              | 14                          |         |           |
| 7                                  |              |              | 15                          |         |           |
| 8                                  |              |              | 16                          |         |           |
| Percent of Dominant Species that a | are OBL, FAC | W, or FAC (e | excluding FAC-) $3/3 = 100$ | %       |           |
| Remarks                            |              |              |                             |         |           |
| Criteria M                         | net.         |              |                             |         |           |
|                                    |              |              |                             |         |           |

| <ul> <li>Recorded Data (Describe in Remarks)</li> <li>Stream, Lake, or Tide Gauge</li> <li>Aerial Photographs</li> <li>Other</li> <li>No Recorded Data Available</li> </ul> |   | WETLAND HYDROLOGY INDICATORS<br>Primary Indicators:<br>Inundated<br>Saturated in Upper 12 Inches<br>Water Marks<br>Drift Lines<br>Sediment Deposits |  |
|---|---|---|--|
| FIELD OBSERVATIONS  |   | Drainage Patterns in Wetlands   |  |
| Depth of Surface Water  | Ø | (in)  | Secondary Indicators (2 or more Required):                               |
| Depth to Free Water in Pit  | Ø | (in)  | <ul> <li>Water-Stained Leaves</li> <li>Local Soil Survey Data</li> </ul> |
| Depth to Saturated Soil   | Ø | (in)  | <ul> <li>FAC-Neutral Test</li> <li>Other (Explain in Remarks)</li> </ul> |

Criteria met.

| SOILS             |                            | C I                             | CALL AND A REAL PROPERTY OF CONTRACT STATEMENT AND A REAL PROPERTY OF CONTRACT OF CONTRACT. | 31 percent slopes   |  |  |  |  |
|-------------------|----------------------------|---------------------------------|---|---|--|--|--|--|
| Map Unit Name (S  | series and Phase):         | EX Chequer an                   | nd Auburn Ioam.   | Drainage Class: Cx C  | essively obtained                        |  |  |  |
| Taxonomy (Subgro  | oup)                       | U                               | 1   | Confirm Mapped Type?  | YES NO                                   |  |  |  |
|                   |                            | PROFIL                          | FILE DESCRIPTION  |   |  |  |  |  |
| Depth<br>(inches) | Horizon                    | Matrix Color<br>(Munsell Moist) | Mottle Colors<br>(Munsell Moist)  | Mottle<br>Abundance/Contrast  | Texture, Concretions,<br>Structure, etc. |  |  |  |
| 0-6               | B                          | 2.544/1                         | N/A   | hone  | rocky clay                               |  |  |  |
| 6-8               | C                          | 546/2                           | NIA   | Moure   | Focky clay                               |  |  |  |
|                   |                            |                                 |   |   |  |  |  |  |
|                   |                            |                                 |   |   |  |  |  |  |
|                   |                            |                                 |   |   |  |  |  |  |
|                   |                            | HYDRIC S                        | SOIL INDICATORS:  |   |  |  |  |  |
|                   |                            | S                               | Organic<br>Listed of<br>Listed of   | ions<br>ganic Content in Surface<br>Streaking in Sandy Soils<br>n Local Hydric Soils List<br>n National Hydric Soils L<br>Explain in Remarks) | S  |  |  |  |
|                   | ate bedrock<br>Hiteria met | hear or at                      | surtau  |   |  |  |  |  |

| Hydrophytic Vegetation Present? | (YES) NO |   |  |  |  |  |
|---------------------------------|----------|---|--|--|--|--|
| Wetland Hydrology Present?      | (YES) NO | Is this Sampling Point Within a Wetland? (YES) NO |  |  |  |  |
| Hydric Soils Present?           | (YES) NO |   |  |  |  |  |
| Remarks                         |          | · ·   |  |  |  |  |
| Criteria met<br>pond.           | . Sit    | le is a man-made stock watering                   |  |  |  |  |
| ,                               |          |   |  |  |  |  |
| 1                               |          |   |  |  |  |  |

DATA FORM - ROUTINE WETLAND DETERMINATION

# ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

| Project/Site Ione Casino Project  |      | Date 1/16/04                        |
|---|------|-------------------------------------|
| Applicant / Owner   |      | County Amador                       |
| Investigator Paul Garcia, John Miller                                     |      | State CA                            |
| Do Normal Circumstances exist on the site?                                | ) NO | Community ID                        |
| Is the site significantly disturbed (Atypical Situation)? YES             | NO   | Transect ID Hind of Dry Cherk Trib. |
| Is the area a potential Problem Area? (If needed, explain on reverse) YES |      | Plot ID SZ6                         |

# VEGETATION

| Dominant Plant Species             | Stratum     | Indicator    | Dominant Plant Species    | Stratum | Indicator |
|------------------------------------|-------------|--------------|---------------------------|---------|-----------|
| 1 Claytonia pertiliata             | H           | FAC          | 9                         |         |           |
| 2 Cynasural echinadus              | H           | NOL          | 10                        |         |           |
| 3 Stillaria media                  | Н           | FACU         | 11                        |         |           |
| 4                                  |             |              | 12                        |         |           |
| 5                                  |             |              | 13                        |         |           |
| 6                                  |             |              | 14                        |         | -         |
| 7                                  |             |              | 15                        |         |           |
| 8                                  |             |              | 16                        |         |           |
| Percent of Dominant Species that a | re OBL, FAC | W, or FAC (e | excluding FAC-) $1/3 = 3$ | 3 %     |           |
| Remarks                            |             |              |                           |         |           |
| Criteria ho                        | t met .     |              |                           |         |           |
|                                    |             |              |                           |         |           |
|                                    |             |              |                           |         |           |

| <ul> <li>Recorded Data (Describe in Remarks)</li> <li>Stream, Lake, or Tide Gauge</li> <li>Aerial Photographs</li> <li>Other</li> </ul> |   |      | WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits   |  |
|---|---|------|---|--|
| FIELD OBSERVATIONS  |   |      | Drainage Patterns in Wetlands   |  |
| Depth of Surface Water  | Ø | (in) | Secondary Indicators (2 or more Required):<br>Oxidized Root Channels in Upper 12 Inches<br>Water-Stained Leaves<br>Local Soil Survey Data<br>FAC-Neutral Test<br>Other (Explain in Remarks) |  |
| Depth to Free Water in Pit  | ø | (in) |   |  |
| Depth to Saturated Soil   | ø | (in) |   |  |

Criteria met.

| SOILS  |  |                                 | 3 70 31  | perant sliper -              | 52                                       |  |
|--|--|---------------------------------|--|------------------------------|--|--|
| Map Unit Name (S   | eries and Phase):  | Exchequer and                   | Auburn learne,   | Drainage Class: Pro          | essively durined                         |  |
| Taxonomy (Subgroup)  |  |                                 | Field Observations Confirm Mapped Type? YES NO   |                              |  |  |
|  |  | PROFIL                          | E DESCRIPTION  |                              |  |  |
| Depth<br>(inches)  | Horizon  | Matrix Color<br>(Munsell Moist) | Mottle Colors<br>(Munsell Moist)   | Mottle<br>Abundance/Contrast | Texture, Concretions,<br>Structure, etc. |  |
| 0-16   | A  | 2.5Y 3/2                        | N/A  | hone                         | rocky clay                               |  |
|  |  |                                 |  |                              |  |  |
|  |  |                                 |  |                              |  |  |
|  |  |                                 |  |                              |  |  |
|  |  | HYDRIC :                        | SOIL INDICATORS:   |                              |  |  |
| <ul> <li>Histosol</li> <li>Histic Epipedon</li> <li>Sulfidic Odor</li> <li>Aquic Moisture Regime</li> <li>Reducing Conditions</li> </ul> |  |                                 | <ul> <li>Concretions</li> <li>High Organic Content in Surface Layer in Sandy Soils</li> <li>Organic Streaking in Sandy Soils</li> <li>Listed on Local Hydric Soils List</li> <li>Listed on National Hydric Soils List</li> </ul> |                              |  |  |
| Gleyed or Low-Chroma Colors  |  |                                 | Other (Explain in Remarks)   |                              |  |  |
| Remarks:   | titersa not  | met-                            |  |                              | -  |  |
| WETLAND DET  | The second s | YES KO)                         |  |                              |  |  |

| Hydrophytic Vegetation Present? | YES NO      |   |
|---------------------------------|-------------|---|
| Wetland Hydrology Present?      |             | Is this Sampling Point Within a Wetland? YES NO |
| Hydric Soils Present?           | YES NO      |   |
| Remarks                         |             |   |
| Site is Wa-                     | lers of the | U.S. at the headwaters.                         |
|                                 |             |   |
|                                 |             |   |
|                                 |             |   |

DATA FORM - ROUTINE WETLAND DETERMINATION