

## **APPENDIX S**

### **RANCHO MISSION VIEJO COVERED ACTIVITIES**

#### **a. Proposed Types and Locations of Development**

The RMV proposed Covered Activities include development in six Planning Areas (PA): PA 1, 2, 3, 4, 5, and 8; PA 10 would be 16,942 acres of open space (not all of which is designated for inclusion into the Habitat Reserve, as noted in *Part I, Chapter 13*, (see *Part IV, Figure 166-M*) certain uses such as orchards, improvements associated with Amantes Camp and Campo Portola are not included in the Habitat Reserve but are included in general open space). PA 9 was eliminated in the B-12 Alternative. The PAs are as follows:

**PA 1** is located primarily in the Narrow Canyon sub-basin. This PA is also referred to as Ortega Gateway. Under the RMV proposed Covered Activities, development in PA 1 would consist of 566 gross acres.

**PA 2** is located primarily in the Chiquita Canyon sub-basin; a small portion is in the Cañada Gobernadora sub-basin. Under the RMV proposed Covered Activities, development in PA 2 would consist of 895 gross acres.

**PA 3** is located within the Cañada Gobernadora and Central San Juan sub-basins. Under the RMV proposed Covered Activities, development in PA 3 would consist of 2,171 gross acres.

**PA 4** is located within the Verdugo and Central San Juan sub-basins. Under the RMV proposed Covered Activities, development in PA 4 would consist of 550 gross acres.

**PA 5** is located within the Central San Juan and Trampas sub-basin. Under the RMV proposed Covered Activities, development in PA 5 would consist of 1,191 gross acres.

**PA 8** is located within the Talega and Blind Canyon sub-basins. Under the RMV proposed Covered Activities, development within PA 8 would consist of 500 gross acres.

**PA 10** is all remaining open space (16,942 acres) and includes portions of the Narrow, Chiquita, Gobernadora, Central San Juan, Verdugo, Trampas, Cristianitos, Gabino, La Paz, and Talega sub-basins.

In addition to the above development, RMV is proposing certain additional Covered Activities including:

- relocated RMV headquarters on an approximately 25-acre site
- relocated CR&R facility on an approximately 18.3-acre site<sup>1</sup>
- relocated employee housing on an approximately 14-acre site
- 50 acres of orchards

It should be noted that for the B-12 Alternative, an overstated impact analysis is discussed in Chapter 13 for development proposed in PAs 4 and 8 and for the orchards proposed in PAs 6 and 7. The final footprint of future development/orchards within these PAs is undefined at this time because the precise location of future development/orchards is not known. In order to provide an analysis of possible impacts to vegetation communities and species, the impacts in PA 4 are assumed to affect a larger “impact area” of approximately 1,127 acres and the impacts for PA 8 are assumed to affect a larger “impact area” of approximately 1,349 acres. The impact areas in PAs 6 and 7 are approximately 249 acres and 182 acres, respectively. Therefore, the total impact area for Alternative B-12 is approximately 7,788 acres. It should be emphasized that this impact analysis overstates the possible impacts to vegetation communities and species because, ultimately, RMV is limited to developing a maximum of 550 acres in PA 4 for residential/commercial and a 175-acre reservoir, 500 acres in PA 8, and a total of 50 acres of orchards in either/or PAs 6 and 7 (as well as all necessary supporting infrastructure in areas outside of the individual development PAs, in addition to the proposed development in the other PAs as previously described above and in Chapter 10). It should be noted that the configuration of the 500 acres of development in PA 8 is required to take into consideration the findings of five years of arroyo toad telemetry studies in conjunction with minimizing impacts, as required by the USACE Special Conditions.

## **b. Infrastructure**

Infrastructure facilities will be necessary to support the development RMV proposes as Covered Activities. These facilities fall into four general categories; roads, bikeways/trails, sewer and water, and drainage facilities. The following describes the infrastructure facilities that are also proposed to be Covered Activities.

### **i. Roads**

The circulation system would have the following components (see *Part IV, Figure 187-R*). The locations of road alignments are conceptual and subject to change based on final design. Roads are to be located within the infrastructure zone depicted on *Part IV, Figure 187-R*. Impacts resulting from road infrastructure as Covered Activities are calculated in *Part I, Chapter 13*

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<sup>1</sup> CR&R/Solag Disposal Company, 31641 Ortega Highway, is located on six acres in the sub-basin. The waste management facility site includes an office building, maintenance shop, fueling station, waste-processing unit, and storage units and yard use for refuse collection.

based on the conceptual alignment and may change within a ten percent increase in impacts contingency factor for the final alignment:

- **Cow Camp Road.** This is an addition to the County of Orange Master Plan of Arterial Highways (MPAH) of a new east-west arterial highway on the north side of San Juan Creek. Cow Camp Road would be constructed as a major arterial between Antonio Parkway and SR-241, and as a primary arterial between SR-241 and Ortega Highway in a “with SOCTIIP” scenario. In a “without SOCTIIP” scenario, Cow Camp Road would be constructed as a major arterial between Antonio Parkway and “F” Street and as a primary arterial between “F” Street and Ortega Highway.
- **Cristianitos Road.** The existing Cristianitos Road between Avenida Pico and the development area in Trampas Canyon would remain a private ranch road. From the proposed PA 5 Trampas Canyon development area to the proposed development area in the Gobernadora sub-basin, a new north-south primary arterial highway would cross San Juan Creek and Cow Camp Road, and connect to the proposed SR-241, in a “with SOCTIIP” and Oso Parkway in a “without SOCTIIP” scenario.
- **Avenida Talega.** An MPAH reclassification of the segment of roadway in unincorporated Orange County from a secondary arterial highway to a collector road (with and without SOCTIIP alternatives).
- **Avenda La Pata/Antonio Parkway.** Existing Avenida La Pata/Antonio Parkway would be widened from the northerly limit of the RMV planning area, north of Ortega Highway, to the southerly limit of the RMV planning area boundary. Also, the road would also be extended further to the south beyond the RMV planning area to Avenida Pico outside of the Subarea 1.
- **Ortega Highway (SR-74).** Existing Ortega Highway would be widened from east of the intersection with Avenida La Pata to the westerly RMV planning area boundary. The typical section within this reach will consist of four through lanes, median with paved shoulders and landscaped area, and parkway in various widths on each side of the roadway to accommodate minimum area for a soft shoulder and surface drainage catchment. The roadway will transition to the existing two-lane section just east the Antonio / La Pata intersection. The San Juan Creek Bridge will be widened by constructing a new separate structure north of the existing structure to accommodate two westbound through lanes. Also, the widening would extend further west into the City of San Juan Capistrano. In total Ortega Highway will be widen to four through lanes from east of Calle Entradero through approximately 1000 feet east of the Antonio / La Pata

intersection. RMV Covered Activities only extends to the improvements within the RMV boundary.

In addition to arterial highway improvements, certain local circulation facilities would be necessary including, but not limited to:

- **Gobernadora Road.** The roadway would be improved to either a four-lane secondary or modified collector to provide internal circulation to development in Gobernadora sub-basin.
- **Center Gobernadora Road.** The roadway would be improved to a two-lane collector road to provide internal circulation to development in Gobernadora sub-basin.
- **Trampas Canyon Road.** The two-lane collector road with a right-of-way reserve would be improved to four lanes to provide internal circulation for development in Trampas sub-basin.

Development in the Verdugo sub-basin under the RMV proposed Covered Activities would be accessed via collector roads internal to the development area from Cow Camp Road and Ortega Highway.

## **ii. Bikeways and Trails**

Bikeways and trails as follows (see *Part IV, Figure 189-R*):

- Class I Off-Road Bikeway along the north side of San Juan Creek;
- San Juan Creek Riding and Hiking Trail along the south side of San Juan Creek; and
- Internal Community Trails that would also provide other community connections to Ladera Ranch, Coto de Caza, and Talega Ranch.

## **iii. Sewer and Water**

Sewer and water facilities (*i.e.*, domestic water, non-domestic water, and wastewater) are shown on *Part IV, Figure 188-R*. Domestic and Non-Domestic Water Facilities needed to support the RMV proposed Covered Activities are identified in *Table S-1*. Wastewater needs for the RMV proposed Covered Activities are identified in *Table S-2*.

**TABLE S-1  
DOMESTIC AND NON-DOMESTIC WATER FACILITIES**

Location	Type of Facility	Facility Capacity
PA 1	One (1) Zone 1 Domestic Water Reservoir No. 1 <sup>a</sup>	4.4 MG
	One (1) Zone A Non-Domestic Water Reservoir No. 1 <sup>a</sup>	4.3 MG
PA 2	One (1) Zone 2 Domestic Water Reservoir No. 1 <sup>c</sup>	1.1MG
	One (1) Zone B Non-Domestic Water Reservoir No. 1 <sup>c</sup>	3.5 MG
	One (1) Zone A Non-Domestic Water Pump Station No. 1 <sup>a</sup>	2,440 gpm
	One (1) Zone B Non-Domestic Water Pump Station No. 1 <sup>a</sup>	4,320 gpm
PA 3	One (1) Zone 1 Domestic Water Reservoir No. 2 <sup>a</sup>	5.3 MG
	One (1) Zone 2 Domestic Water Reservoir No. 2 <sup>a</sup>	5.4 MG
	One (1) Zone 3 Domestic Water Reservoir No. 1 <sup>c</sup>	1.4 MG
	One (1) Zone 3 Domestic Water Pump Station No. 1 <sup>a</sup>	500 gpm
	One (1) Zone A Non-Domestic Water Reservoir No. 2 <sup>a</sup>	2.3 MG
	One (1) Zone B Non-Domestic Water Reservoir No. 2 <sup>a</sup>	3.4 MG
	One (1) Zone B Non-Domestic Water Pump Station No. 2 <sup>a</sup>	2,370 gpm
PA 4	One (1) Zone 2 Domestic Water Reservoir <sup>b</sup>	Undetermined
	One (1) Zone 3 Domestic Water Reservoir <sup>b</sup>	Undetermined
	One (1) Zone 3 Domestic Water Pump Station <sup>b</sup>	Undetermined
	One (1) Zone 4 Domestic Water Reservoir <sup>b</sup>	Undetermined
	One (1) Zone 4 Domestic Water Pump Station <sup>b</sup>	Undetermined
	One (1) Zone B Non-Domestic Water Reservoir <sup>b</sup>	Undetermined
PA 5	One (1) Zone 2 Domestic Water Reservoir No. 3 <sup>a</sup>	2.9 MG
	One (1) Zone 3 Domestic Water Reservoir No. 2 <sup>c</sup>	1.5 MG
	One (1) Zone 4 Domestic Water Reservoir No. 1 <sup>c</sup>	1.1 MG
	One (1) Zone 3 Domestic Water Pump Station No. 2 <sup>a</sup>	1,000 gpm
	One (1) Zone 4 Domestic Water Pump Station No. 1 <sup>c</sup>	400 gpm
	One (1) Zone A Non-Domestic Water Reservoir No. 3 <sup>a</sup>	1.2 MG
	One (1) Zone B Non-Domestic Water Reservoir No. 3 <sup>a</sup>	2.3 MG
	One (1) Zone A Non-Domestic Water Pump Station No. 2 <sup>a</sup>	2,870 gpm
	One (1) Zone B Non-Domestic Water Pump Station No. 3 <sup>a</sup>	1,560 gpm
PA 7/	One (1) Zone 2 Domestic Water Reservoir No. 4 <sup>b</sup>	Undetermined

**TABLE S-1  
DOMESTIC AND NON-DOMESTIC WATER FACILITIES**

Location	Type of Facility	Facility Capacity
New RMV Headquarters	One (1) Zone B Non-Domestic Water Pump Station No. 5 <sup>b</sup> .	Undetermined
PA 8	One (1) Zone 2 Domestic Water Reservoir No. 5 <sup>b</sup> .	3.9 MG
	One (1) Zone 3 Domestic Water Pump Station No. 4 <sup>b</sup> .	320 gpm
	One (1) Domestic Water Pump Station <sup>b</sup> .	60 gpm
	One (1) Zone B Non-Domestic Water Reservoir No. 5 <sup>b</sup> .	2.1 MG
	One (1) Zone C Non-Domestic Water Reservoir No. 1 <sup>b</sup> .	0.7 MG
	One (1) Zone C Non-Domestic Water Pump Station No. 1 <sup>b</sup> .	510 gpm
gpm: gallons per minute MG: million gallons a. facility to be located within the development PA boundary. b. facility to be located within impact analysis/potential orchard area boundary. c. facility to be located in open space. Sources: Rancho Mission Viejo, Huitt Zollars, and Tetra Tech, Inc., 2005		

**TABLE S-2  
WASTEWATER FACILITIES**

Location	Type of Facility	Facility Capacity
PA 2	One Small Wastewater Lift Station <sup>a</sup> .	260 gpm
PA 3	One Small Wastewater Lift Station	350 gpm
	One Large Wastewater Lift Station	4,850 gpm
PA 5	One Large Wastewater Station: ID No. 3	2,720 gpm
PA 7/New RMV Headquarters	One Small Wastewater Lift Station	Undetermined
PA 8	One Large Wastewater Lift Station	1,684 gpm
	Expansion to Talega Lift Station	Undetermined
gpm: gallons per minute a. facility to be located within development PA boundary. Source: Tetra Tech, Inc., 2004		

**iv. Drainage and Water Quality**

Drainage facilities (*i.e.*, culverts) are shown on *Part IV, Figure 190-R*. Combined control facilities to address pollutants and hydrologic conditions of concern of the type and extent described in the WQMP for the RMV proposed Covered Activities would also be associated with each proposed PA. The exact location of these facilities is undetermined; however, the conceptual WQMP (*Appendix K*) identifies the necessary area, volume, and catchment location for these facilities. All combined control facilities would be located within the footprint of the development PAs. In addition all detention facilities required for flood control purposes (above the combined control facilities) would also be located within the footprint of the development PAs.

In addition to culverts, combined control facilities and flood detention facilities, RMV in cooperation with SMWD would construct the Gobernadora Multi-purpose Basin (*Part IV, Figure 190-R*). The Gobernadora Multi-purpose Basin would consist of a storm detention basin that would be established as wetland and riparian habitat, an infiltration gallery to capture and divert flows to the wetlands, a pump station, and pipeline. The Gobernadora Multi-purpose Basin would be used to capture and naturally treat urban runoff and storm flows to: **(1)** reduce downstream erosion and sedimentation; **(2)** address excessive surface and groundwater; and **(3)** improve the water quality in the Gobernadora Creek that flows downstream to the Gobernadora Ecological Restoration Area (GERA).

**v. Existing RMV Planning Area Facilities**

To service its ongoing ranch operations, RMV has existing water lines, wells, stock ponds, and stream crossing culverts that require periodic maintenance. These facilities are shown on *Part IV, Figure 191-R*.

**vi. Existing and Future Water Quality and/or Flood Control Facilities**

Water quality facilities, including forebays, bioswales, natural treatment systems, percolation, detention and retention basins, and other similar structures will be constructed within the future RMV development Planning Areas to treat pollutants of concern and hydrological conditions of concern as set forth in the WQMP (*Appendix K*). Flood control facilities including forebays, flood control channels, percolation, retention and detention basins and other similar structures will also be constructed within the future RMV development Planning Areas. Flood control facilities and/or water quality treatment facilities will discharge to receiving waters through the drainage conveyance systems shown in *Part IV Figures 166-M and 190-R*. In order for these facilities to function as designed periodic maintenance will be required as set forth in the operations and maintenance element of the WQMP or the Orange County DAMP as applicable. In addition to future facilities, maintenance of the existing Las Flores water quality treatment and flood control

facilities in the community of Las Flores is included as a RMV Covered Activity. This facility requires periodic maintenance, including the removal of vegetation to ensure that both the water quality treatment and flood control components function as designed. Minimization measures applicable to maintenance of future water quality and/or flood control facilities within or associated with (e.g. culvert outfalls) future RMV development Planning Areas and the Las Flores facility are set forth in Appendix U.

**c. Ortega Rock**

Operation of Ortega Rock is governed by Orange County Sand and Gravel Site Permit #SP 91-072 which includes the following: Plan of Operations, Drainage and Erosion Control Plan, Vehicular Access Plan, Reclamation Plan, General Location of Uses Plan, Typical Portable AC/Concrete Plants and a Phasing Plan.

**i. Mine Plan and Mined Topography**

The mining area is shown in Figure S-1 included in this appendix. Processing operations, including settling ponds will encompass 126 acres by the completion of operations. Actual active surface disturbance will be kept to the minimum areas necessary for mining and processing at any time period because as mined surfaces reach final grade, and as settling ponds fill, those surfaces would be reclaimed.

The topography of the completed site is best described as a ridgeline, oriented north-south along the quarry axis. The processing area will appear as a series of broad terraces representing the former settling pond surfaces. The quarry floor is planned at elevations between 800 and 850 feet AMSL, with a gently sloping floor that drains southerly. Most quarry walls are designed and constructed at a reclaimed grade of 2:1 for a stable final slope condition, with designated areas designed for rock faces with slopes exceeding 1:1.

**ii. Type of Mining and Equipment Used**

Operations at the quarry use conventional mining practices common in the industry. Operating benches are constructed and progressively extended to remove overburden and waste rock materials, and to mine the mineral resource. Quarrying is initiated by establishing a working bench at the upper quarry limit. As the initial bench is extended laterally along the quarry face, a new bench is established at the next lower level. Bench areas are extended until the planned quarry backwall is reached; successive benches are developed as the quarry progresses downward. Explosives are brought to the site by a contractor, blasted on an as-needed basis and are not stored on the site.

Excavation and loading of material into haul trucks is performed using a front-end loader or hydraulic excavator. The rock is then hauled to the primary crusher, or the waste rock pile, depending on whether the rock is PCC-grade rock, other construction aggregate, or sub-grade waste rock.

**iii. Ore Transport**

Haul trucks take rock directly to the crusher. Alternatively, a haul truck may deposit rock in a temporary stockpile area near the crusher to be fed into the crusher at times when haulage trucks are not operating, or to separate ore with different characteristics. Ore is crushed to product size specifications.

**iv. Equipment**

Stationary equipment and structures are located at the plant site. An equipment maintenance and fuel storage site services on-site equipment and fuel trucks for off-site deliveries. Tanks for diesel, oil, and hydraulic fluids are sited in this area and are regulated by Orange County Health Care Agency (OCHCA).

A drill rig, loaders, and haul trucks are necessary to complete the operations described above. Other types of mobile equipment and/or machines to be employed are typical excavation equipment, such as: a dozer, self-loading scraper, front-end wheel loader, portable water pump, motor grader, conveyers, and hydraulic excavator. A water truck will be used for maintenance of surfaces and dust control. The type of vehicles used vary over time due to availability, and the use of new models to suit different on-site conditions, and to perform specific short-term reclamation tasks. A concrete plant and AC plant will be located within the process plant area.

A mobile fuel and lubrication truck is used to service vehicles on-site. The fuel/lube truck carries a limited amount of petroleum products, is equipped with automatic shut-off valves to prevent spills, and also carries appropriate absorbent materials to contain and recover spillage. An OCFA approved Spill Prevention, Control, and Countermeasures Plan will guide reporting, control, and cleanup activities in the event of a spill in the quarry or other operating areas.

**v. Quantity and Type of Materials**

Maximum production levels are primarily determined by market demand; it is planned that at least 18 million tons of aggregate materials will be mined over the next 50 years.

**vi. Maximum Depth**

The maximum mining depth varies throughout the site, but averages approximately 400 feet.

**vii. Unused Materials Disposal**

Mined materials not suitable for construction aggregates will be placed on areas where mining is completed and used for surface contouring in reclamation.

**viii. Schedule**

Currently Ortega Rock is an idle mine as defined by the County of Orange. It is anticipated that the mine will remain idle through 2006 and potentially re-activate in 2007. Reasonably foreseeable operations are presently planned until approximately December 2055, for the currently defined reserves. Other resources are known that would be available for continued operations beyond this time frame.

**ix. Reclamation**

Closure of Ortega Rock is governed by the Surface Mining and Reclamation Act (SMARA) associated implementing regulations in the California Code of Regulations as set forth in SP 91-072.

**d. Restoration or Enhancement beyond RMV Obligations**

Implementation of enhancement or restoration measures beyond RMV's permit obligations on the lands designated for inclusion in or enrolled in the RMV Habitat Reserve shall be a Covered Activity. The specifics on the location, extent and type of additional enhancement or restoration measures shall be approved by the Wildlife Agencies prior to implementation. The increase in habitat value and benefits resulting from the enhancement or restoration measures shall be considered as "Mitigation Credits". These Mitigation Credits may either be used by RMV or transferred by RMV to third parties (by sale, assignment or otherwise); provided, the use/transfer of such Mitigation Credits is approved by the Wildlife Agencies. To track the application or transfer of Mitigation Credits, RMV shall implement a bookkeeping system acceptable to the Wildlife Agencies and report on the use/transfer of Mitigation Credits.