

a. Plan Description

The Crossroads in Winchester will be provided with water and sewer service by Eastern Municipal Water District (EMWD).

Water Facilities

According to the EMWD Master Plan, the portion of the Specific Plan area north of Domenigoni Parkway lies within the 1627 high water level (HWL) pressure zone and the portion of the Specific Plan area south of Domenigoni Parkway, is within the 1700 HWL pressure zone.

Storage, pumping, and pipeline facilities will be designed in accordance with EMWD standards. Facilities needed to serve the Project site are generally shown on **Figure A-5-1 – Regional Water Facilities**.

An 18-inch pipeline is proposed to run from a 36-inch main line located one-half mile easterly of Winchester Road in order to provide the primary source of water supply to the Project site. An 18-inch pipeline is also proposed to extend from Leon Road to provide a secondary source of water supply to Crossroads North. These pipelines will also be the source of supply to the 1700-foot pressure zone booster station and reservoir.

The initial construction phases will receive water from the existing main lines until the growth of the community warrants the expanded storage and distribution system. Facilities will be located in street rights-of-way, whenever possible. On-site systems will be integrated with the EMWD Master Plan to form a reliable supply network for the Winchester area, shown in **Figure A-5-2 – Water Plan**.

Water will be served with a blend of State Project and Colorado River waters, imported and supplied to EMWD by MWD. Development of additional sources of water is not considered necessary in order to provide service to this Project.

The estimated residential demand for water is as follows:

Average Day Demand (ADD) =

$$(395 \text{ DU})(3.5 \text{ person/DU})(180 \text{ gpcd}) = 248,850 \text{ gallons}$$

$$(530 \text{ DU})(2.5 \text{ person/DU})(120 \text{ gpcd}) = 159,000 \text{ gallons}$$

$$\text{Total Average Day Demand} = 407,850 \text{ gallons}$$

$$\text{Maximum Day Demand (MDD)} = 2(\text{ADD}) = 815,700 \text{ gallons}$$

The commercial and park demand is estimated as:

$$(ADD) = (32.5 \text{ Ac.})(2,000 \text{ gal/Ac.})+(7.5 \text{ Ac.})(4,000 \text{ gal/Ac.}) = 95,000 \text{ gallons}$$

$$(MDD) = 2(ADD) = 190,000 \text{ gallons}$$

The Average Day Demand (ADD) previously approved by the EMWD in the Water Supply Assessment, dated February, 2007, that was prepared for The Crossroads in Winchester Specific Plan Amendment No. 1 is 633,519 gallons. The total ADD proposed by The Crossroads in Winchester Specific Plan Amendment No. 2 is 502,850 gallons.

Final pipeline design will insure facilities are sized to provide the maximum daily flow plus required fire flows (as determined by the Riverside County Fire Marshall) with a minimum residual pressure of 20 pounds per square inch (psi).

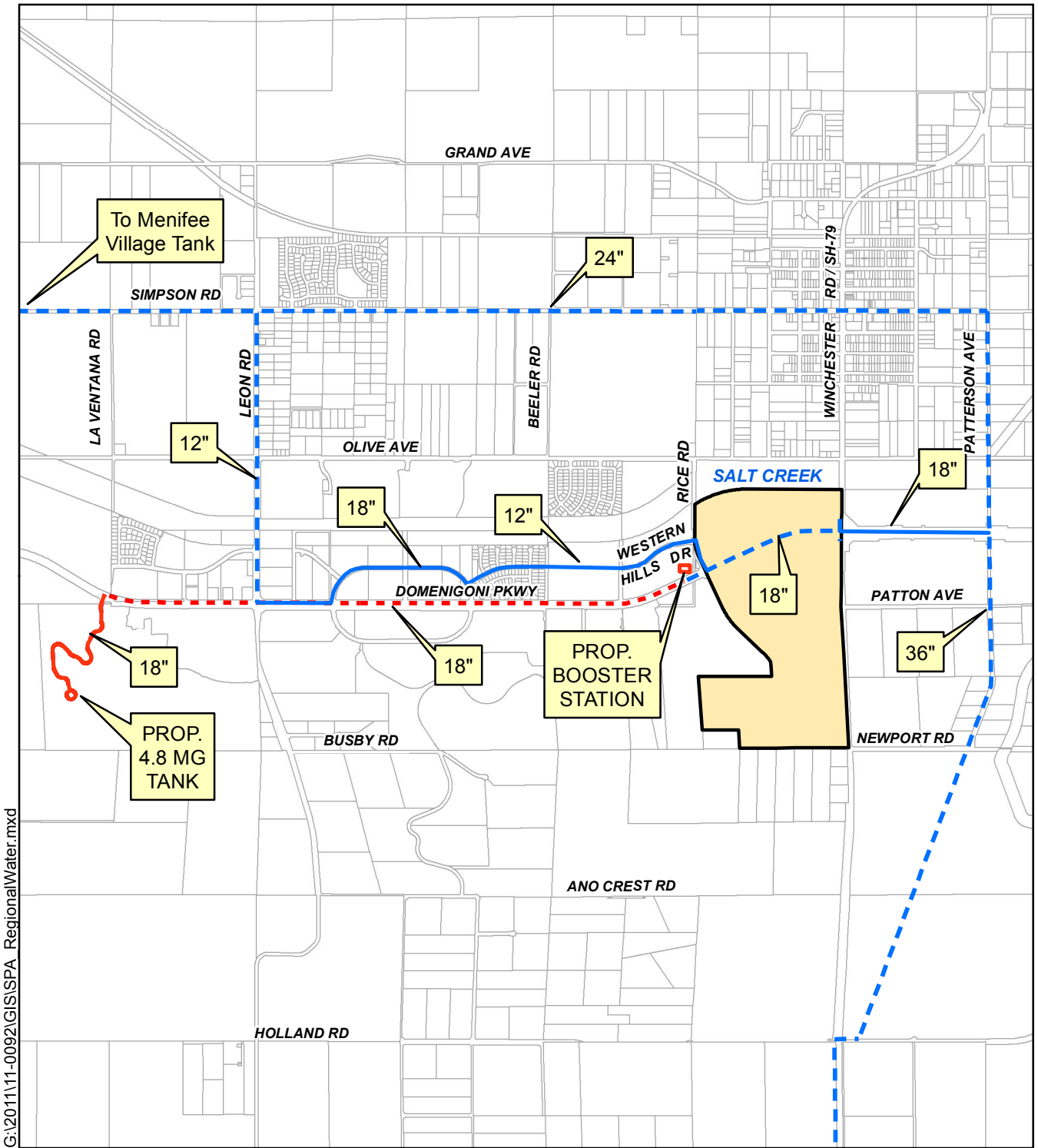
Reclaimed Water Facilities

The provision of reclaimed water usage, as required by new developments, is applicable to The Crossroads in Winchester. Water reclamation and storage facilities for reclaimed water are not yet in place but are being planned by EMWD, as shown in **Figure A-5-3 – EMWD Regional Reclaimed Water Facilities**.

Proposed parks and common landscape areas are considered prime candidates for reclaimed water usage, as described in Title 22 of the California Administrative Code. The design and installation of such facilities will be implemented in accordance with EMWD Master Plan concepts and/or policies. The Project will be constructed with a dual pipeline system, potable and reclaimed, such that when reclaimed facilities are constructed to the site, parks and common landscape areas will be served with reclaimed water. **Figure A-5-4 – Reclaimed Water Plan**, shows the plan for a reclaimed water system.

Sewer Facilities

The wastewater generated by development of the Project will be treated at one of EMWD’s Regional Water Reclamation Facilities. A series of trunk lines enable EMWD to divert flows to either Perris Valley RWRf or the Sun City RWRf. Planned regional facilities are shown on **Figure A-5-5 – Sewer Plan**.



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Source: Riverside County GIS, 2011

Legend

- Existing Water
- 1627 Pressure Zone
- 1700 Pressure Zone
- Proposed Water Main
- Project Boundary
- Parcels

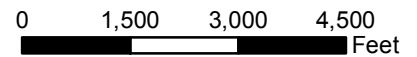
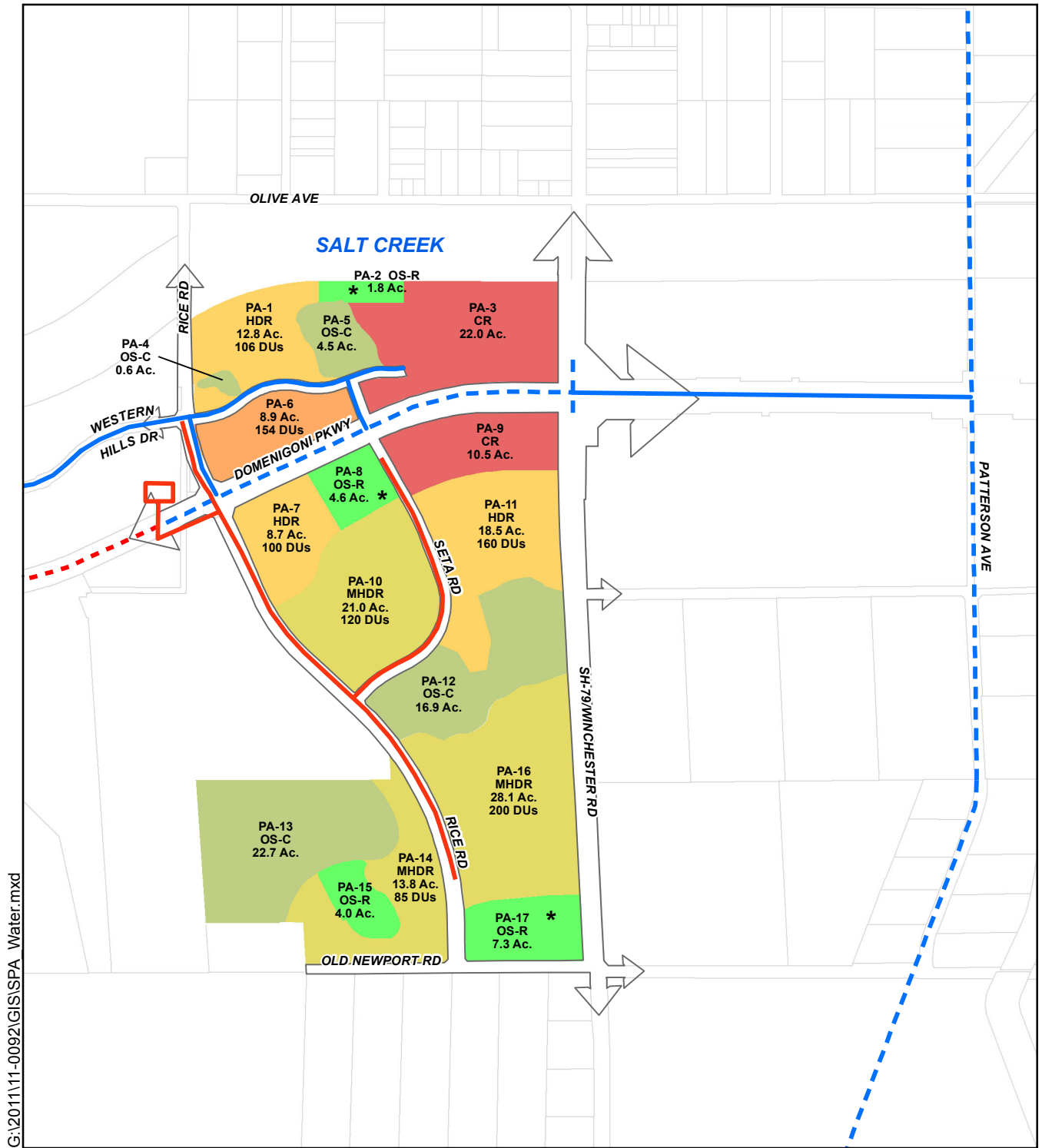


Figure A-5-1 - Regional Water Facilities



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- Proposed Water**
- 1627 Pressure Zone
 - 1700 Pressure Zone
 - 1700' Pressure Zone Booster Station
- Existing Water**
- 1627 Pressure Zone
 - 1700 Pressure Zone

- Land Use Plan**
- Medium High Density Residential - 62.9 ac.
 - High Density Residential - 40 ac.
 - Very High Density Residential - 8.9 ac.
 - Commercial - 32.5 ac.
 - Open Space Recreation - 17.7 ac.
 - Open Space Conservation - 44.7 ac.

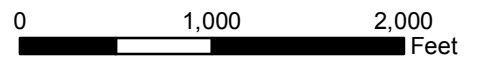
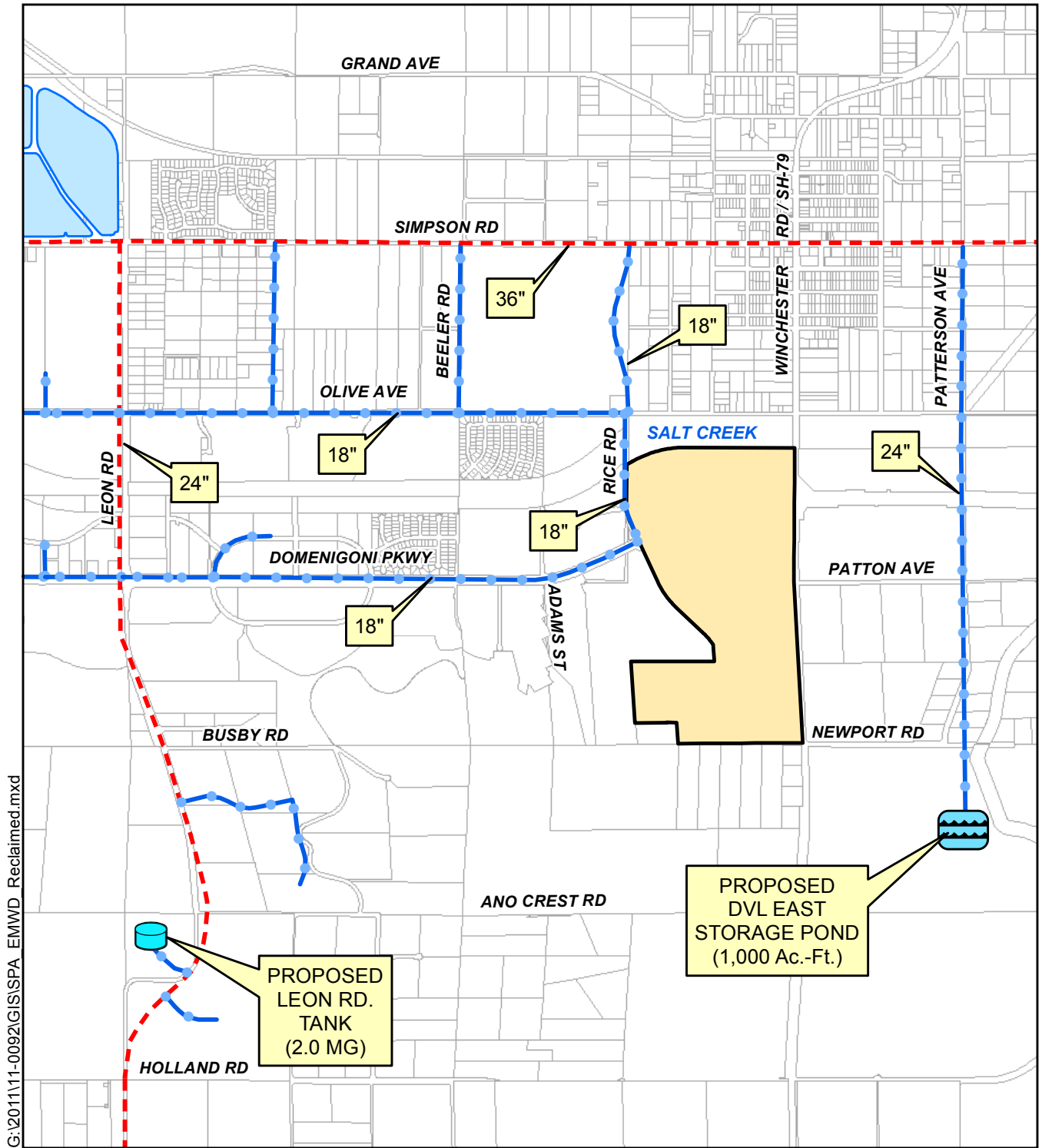


Figure A-5-2 - Water Plan

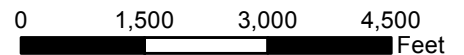


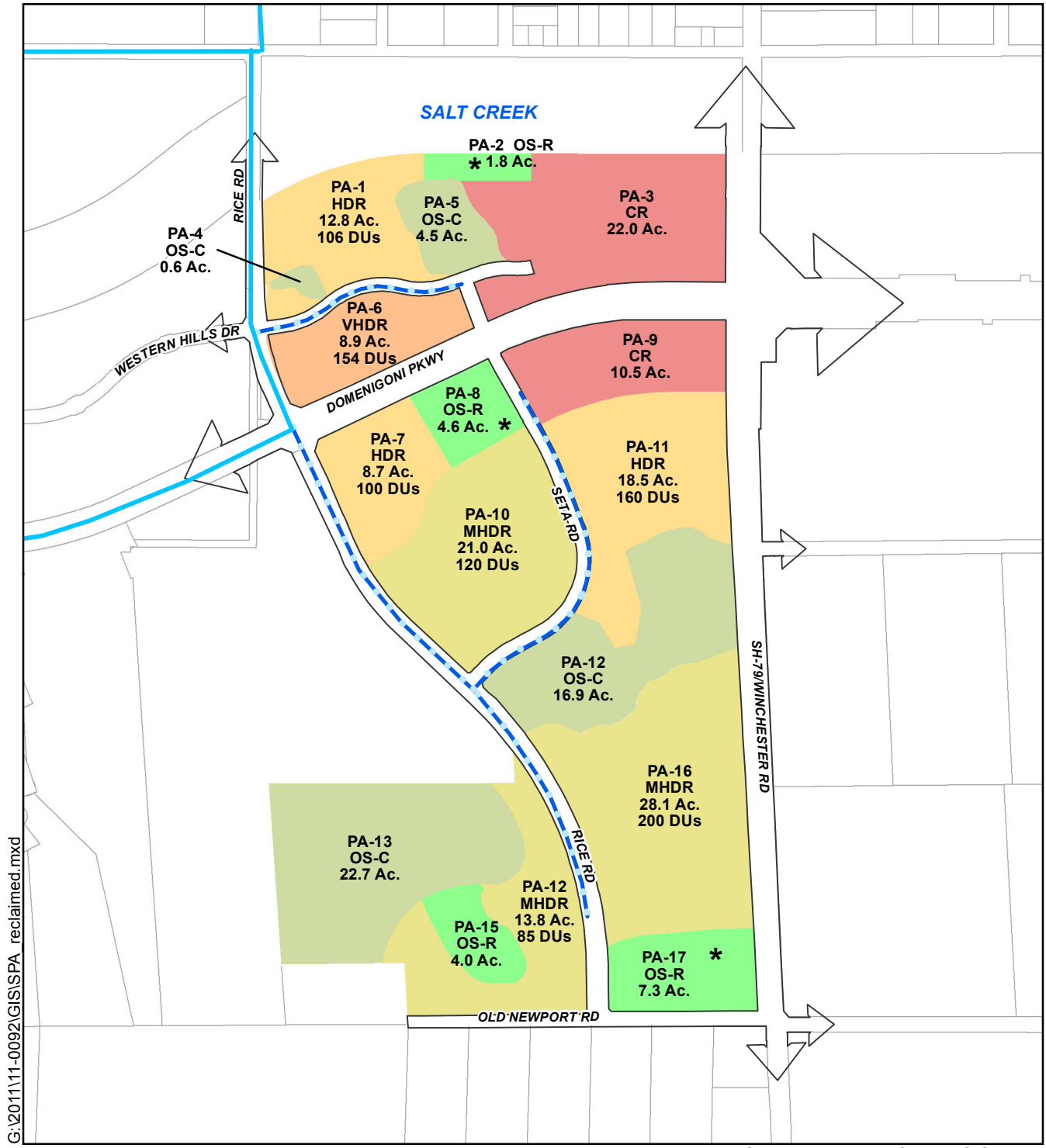
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Source: EMWD, 2008

LEGEND

- Proposed Reclaimed Water
- - - Existing Reclaimed Water
- Existing Ponds (Tertiary)
- Project Boundary
- Parcels



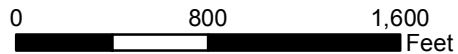


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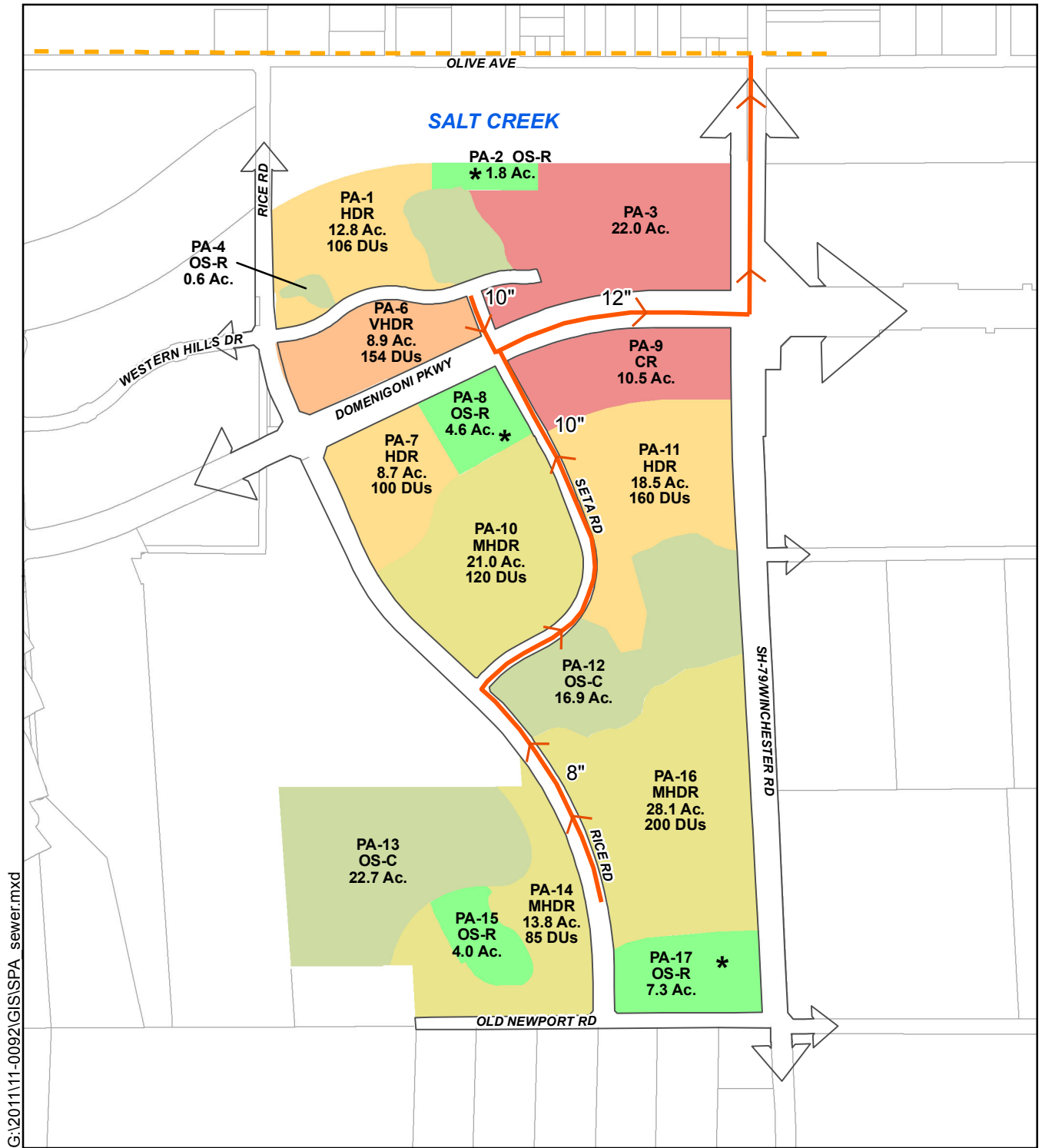
Source: Riverside County GIS, 2012

LEGEND

- Proposed Reclaimed Water Lines
- Proposed Regional Reclaimed Water Lines
- Medium High Density Residential (62.9 ac.)
- High Density Residential (40 ac.)
- Very High Density Residential (8.9 ac.)
- Commercial Retail (32.5 ac.)
- Open Space Conservation (44.7 ac.)
- Open Space Recreation (17.7 ac.)



* Basin Locations **Figure A-5-4 - Reclaimed Water Plan**



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Source: Riverside County GIS, 2012

LEGEND

- Proposed Sewer
- Existing Sewer
- Medium High Density Residential (62.9 ac.)
- High Density Residential (40 ac.)
- Very High Density Residential (8.9 ac.)
- Commercial Retail (32.5 ac.)
- Open Space Conservation (44.7 ac.)
- Open Space Recreation (17.7 ac.)
- * Basin Locations

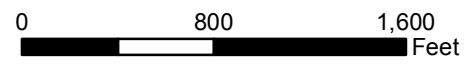


Figure A-5-5 - Sewer Plan

Existing EMWD Master Plan facilities include a main trunk line running east to west along the Olive Avenue alignment, connecting to the existing regional lift station located at La Ventana and Olive. This lift station pumps wastewater to the Winchester WRF. Once at the Winchester WRF EMWD is able to direct flows to either regional treatment plant. This system will be supplemented by smaller local sewers (8 to 12 inches). The Crossroads in Winchester will construct facilities along Highway 79, connecting to the existing trunk line located in Olive Road. Internal 8-inch to 12-inch pipelines will collect wastewater within the Project site and convey to the line along Highway 79.

The projected average daily wastewater flow (ADF) represented by the proposed residential development is estimated as follows:

$$\text{ADF} = (771 \text{ DU})(3.5 \text{ persons/DU})(100 \text{ gpd/person}) = 269,850 \text{ gallons}$$

$$(154 \text{ DU})(2.5 \text{ persons/DU})(80 \text{ gpd/person}) = 30,800 \text{ gallons}$$

The anticipated ADF generated by other development is equal to:

$$\text{ADF} = (32.5 \text{ Ac.})(1,700 \text{ gal/Ac.}) = 55,250 \text{ gallons}$$

The existing 36-inch trunk sewer in Olive Avenue has the capacity to service The Crossroads Project in its entirety.

b. Development Standards

- 1) All lines shall be designed per EMWD standards.
- 2) The location of facilities will conform to County of Riverside and EMWD standards.
- 3) Water and wastewater facilities shall be installed in accordance with the requirements and specifications of the Riverside County Health Department and EMWD.
- 4) The design of regional facilities shall conform to the current EMWD Master Plan of Facilities.
- 5) All water and sewer lines shall be placed underground and inspected per the policies of the EMWD.
- 6) Any design of off-site facilities shall be coordinated with the affected property owners.
- 7) The design of all water facilities shall provide fire protection to the satisfaction of the Fire Department of the County of Riverside.

- 8) The design and installation of proposed parks and common landscape areas shall be constructed with a dual pipeline system, potable and reclaimed, such that when reclaimed facilities are constructed to the site, parks and common landscape areas will be served with reclaimed water.