

4. Drainage Plan

a. Drainage Plan Description

The Specific Plan area drains naturally into two separate watersheds: approximately 60 percent of the Specific Plan area is tributary to the Salt Creek Channel, and the remaining 40 percent in the southeast Project area drains to the Murrieta Creek/Warm Springs Valley drainage area (**Figure A-4-1 - Existing Hydrology**). The Specific Plan drainage area extends roughly from the Salt Creek Channel northerly of the Project to the Old Newport Road in the Project's southerly area, and from Winchester Road westerly to Rice Road.

The southerly drainage area is tributary to Murrieta Creek/Warm Springs Valley and will feed into storm drain facilities as shown on the **Figure A-4-2 - Proposed Drainage Plan**, and ultimately into stormwater facilities within the Warm Springs Creek basin. Stormwater detention/water quality basin constructed at the southeast corner of the Project will attenuate peak discharges to no more than what is currently discharged in undeveloped conditions.

The northerly drainage area is further divided into two separate sub areas, known as the Northerly and Salt Creek drainage areas . Both northerly subareas are tributary to Salt Creek Channel. The expansion of Salt Creek Channel since approval of Specific Plan No. 288 has significantly reduced the floodplain over the Project area. Salt Creek Channel is sized based on fully built out General Plan conditions. As such, increased runoff does not need to be mitigated from these drainage areas. Water quality basins are included in the Northerly and Salt Creek drainage areas.

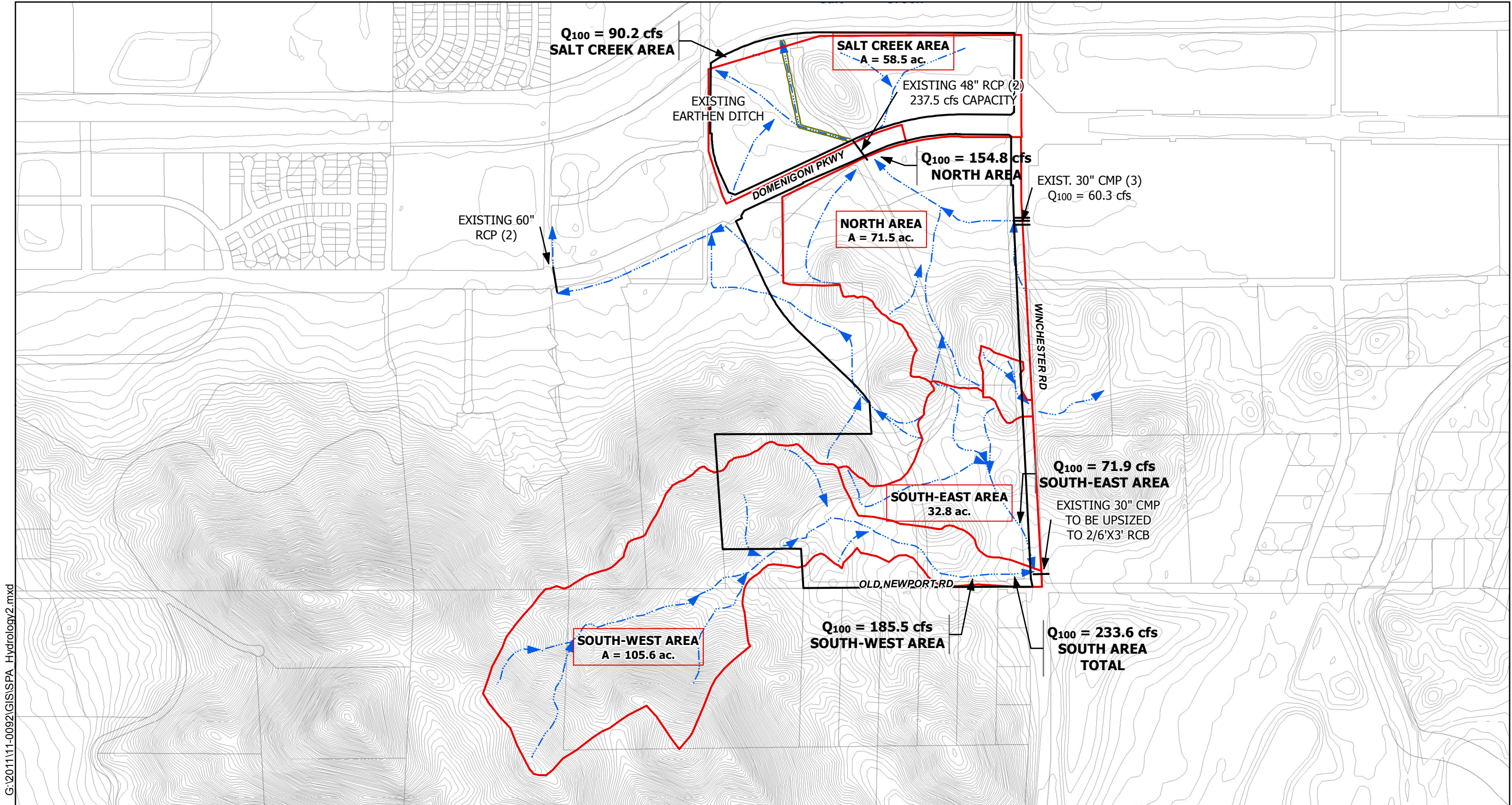
Additionally, bypass pipes are proposed to collect and convey all off-site runoff through the Specific Plan Area to their existing downstream flow path without mixing with any on-site flows that are tributary to a water quality basin. Only after on-site flows have been treated for water quality purposes will on-site flows mix with previously mentioned bypass off-site flows.

Approximately six acres of the Project site adjacent to Salt Creek are designated as a Zone "A" floodplain by the Federal Insurance Administration. Zone "A" floodplains are areas subject to 100-year floods. However, a Conditional Letter of Map Revision removing the six acres from the Zone "A" floodplain was approved by Federal Emergency Management Agency (FEMA) on December 21, 2005, Case No. 05-09-A083R. A Letter of Map Revision (LOMR) will be required prior to the issuance of any building permits within this area. **Figure A-4-2 - Proposed Drainage Plan** depicts the major drainage facilities necessary

to serve the various planning areas. Additional facilities within the planning areas may consist of a combination of street flows, open channels, underground storm drains, as well as natural and man-made watercourses and earthen swales.

b. Development Standards

- 1) All storm drain facilities will be designed in accordance with Riverside County Flood Control and Water Conservation District (Flood Control) design standards to provide protection from a 100-year storm event.
- 2) All drainage and storm drain facilities will be maintained by one of the following: Flood Control, Riverside County Transportation Department, a community service financing mechanism such as a County Service Area (CSA) or a County Service District (CSD), or Valley-Wide Recreation and Park District.
- 3) All projects proposing construction activities including clearing, or excavation, that result in the disturbance of at least one acre total land area, or activity which is part of a larger common plan of development of one acre or greater shall obtain the appropriate National Pollution Discharge Elimination System (NPDES) construction permit and pay the appropriate fees. This will typically require obtaining approval under the States Construction General Permit, which will include preparing a SWPPP.
- 4) All developments within the Specific Plan boundaries shall be subject to future requirements adopted by the County to implement the MS4 Permit which requires a WQMP and NPDES program. Three regional water quality basins are proposed within this Specific Plan area to mitigate the impact on the water quality the proposed development may have – one for each drainage subareas. The southerly area water quality basin shall comply with the requirements of the San Diego Regional Board and the Northerly and Salt Creek areas shall be in compliance with the Santa Ana Regional Board. The basins are proposed to be modified sand filter basins to treat all potential and expected pollutants of concerns that may be generated from the site. In addition, a Project Specific WQMP shall accompany each development proposal at the time the proposal is submitted to the county. Project specific mitigation measures may include, but not be limited to on-site retention, vegetated swales, monitoring programs, low impact development, etc.



Source: Riverside County GIS, 2012

- LEGEND**
- > Flow Line
 - Hydrologic Boundary
 - Earthen Ditch
 - Project Boundary

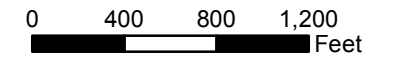
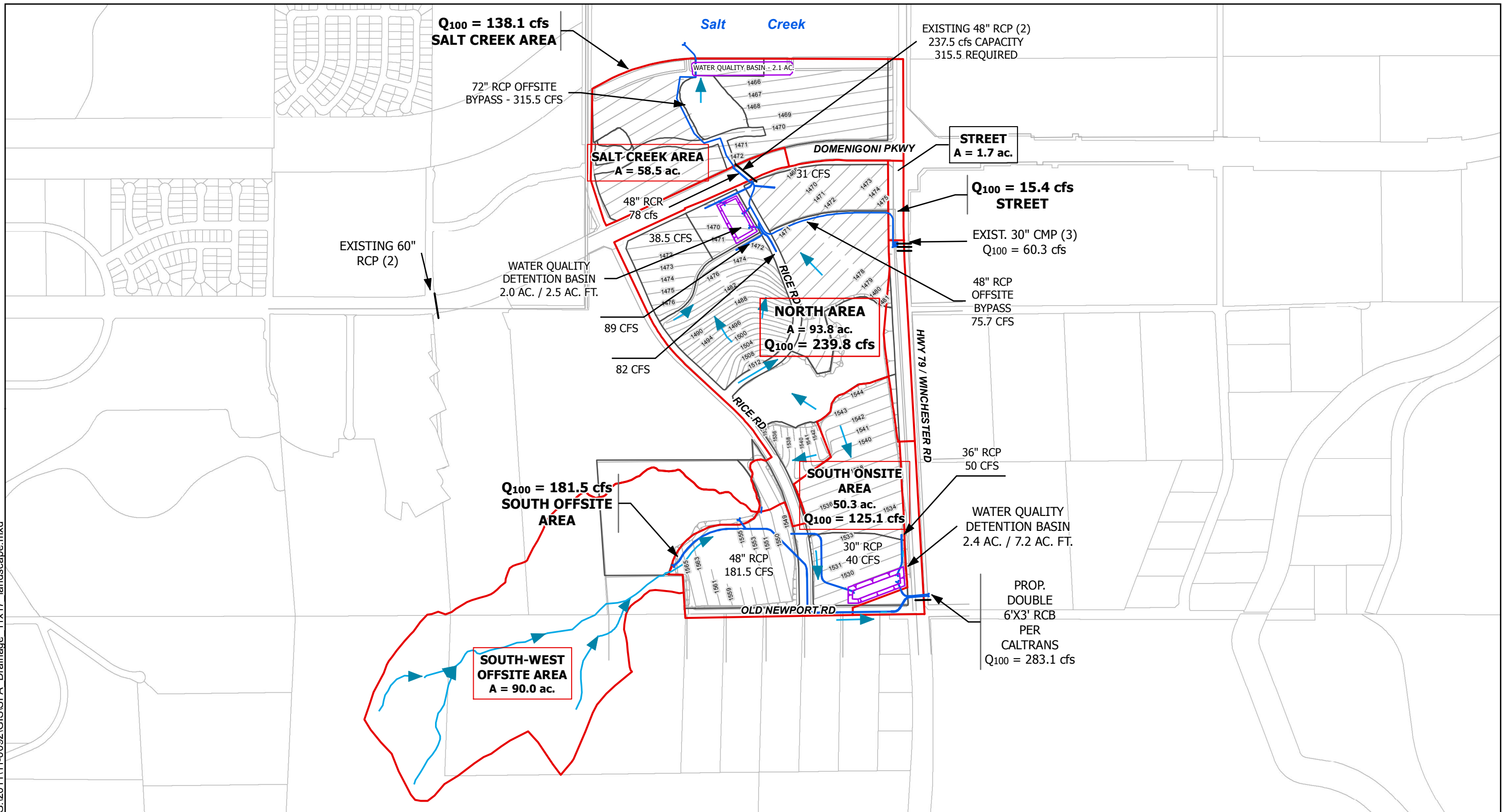


Figure A-4-1 - Existing Hydrology

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G:\201111-0092\GIS\SPA Drainage_11x17_landscape.mxd



LEGEND

- Proposed Hydrologic Boundary
- Proposed Pipelines
- Flow Direction
- Basins
- Grading Contours
- Planning Area Boundaries



Source: Riverside County GIS, 2012

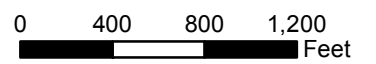


Figure A-4-2 - Proposed Drainage Plan