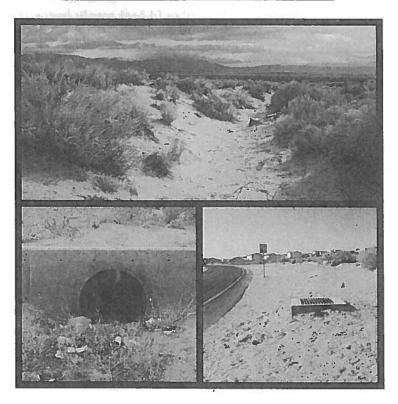
# 98<sup>TH</sup> STREET IMPROVEMENTS FROM GIBSON BOULEVARD SW TO SENATOR DENNIS CHAVEZ BOULEVARD SW DRAINAGE REPORT



# **April 2013**

FOR:

# THE CITY OF ALBUQUERQUE

Department of Municipal Development Engineering Division

By:

WHPacific

6501 Americas Parkway NE, Suite 400 Albuquerque, NM 87110 LAND DEVELOPMENT SECTION

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of flows and the resulting ponding that may surcharge to the median area from the subdivision to the north was beyond the scope of this study.

### 4. Phase II

Phase II includes part of Basin 4, and Basins 5 and 6. Drainage facilities constructed under phase II are as described above in the General subsection above. Roadway runoff is collected and conveyed to storm drain laterals that tie to existing stub-outs.

### 5. Calculations

Tables summarizing street flow to each catch point in the road and hydraulic calculations are shown in the Section VIII of the report below. Hydrologic and hydraulic calculations are included in the Appendix.

# B. Off-Site Flow

The only offsite flow impacting the project is the undeveloped area west of the project from approximately Station 10+00 to 20+00. The offsite area is shown on the Drainage Basin Map, Exhibit 2, and is labeled Offsite A and Offsite B and is described in Section V. The Sacate Blanco Arroyo drains the southern portion of the site, Offsite A, and local drainage-ways have developed on the northern portion of the site that drain Offsite B. An existing culvert is located approximately at Station 12+29, currently draining Offsite A under the existing 2-lane interim road.

Based on direction from the City and AMAFCA, it will be replaced with a structure capable of conveying the developed flow for the entire undeveloped area; both Offsite A and Offsite B. The developed flow of 137 cfs was obtained from the *Master Drainage Plan for the Lands of Salazar*, dated November 13, 2006. The Salazar Family Trust owns the land on both the west and east sides of 98<sup>th</sup> Street in this vicinity. The existing 30-inch culvert will be removed and two-36-inch culverts will be constructed. The crossing structure will include erosion control for the existing condition flow. Hydraulic conditions will need to be evaluated when Offsite A and B are developed. Additional erosion control may be required if the flow and/or velocity is increased due to development or re-grading of the site.

## 1. Interim Condition

Currently Offsite B drains eastward to 98<sup>th</sup> Street. A catch basin was constructed at approximately Station 18+90, apparently to collect Offsite B runoff, but was constructed at an elevation higher than the surrounding ground and the inlet is not functioning. It will be removed as part of this project. During the interim condition (construction of 98<sup>th</sup> Street is completed but the Offsite A and Offsite B are undeveloped) a temporary berm and swale will be constructed along the western boundary of 98<sup>th</sup> Street from roughly Station 13+20 to 20+00 to block flow from draining onto the street and direct it south to the culvert crossing at Station 12+29. The berm will be a minimum of 2-feet tall and constructed of compacted earth.