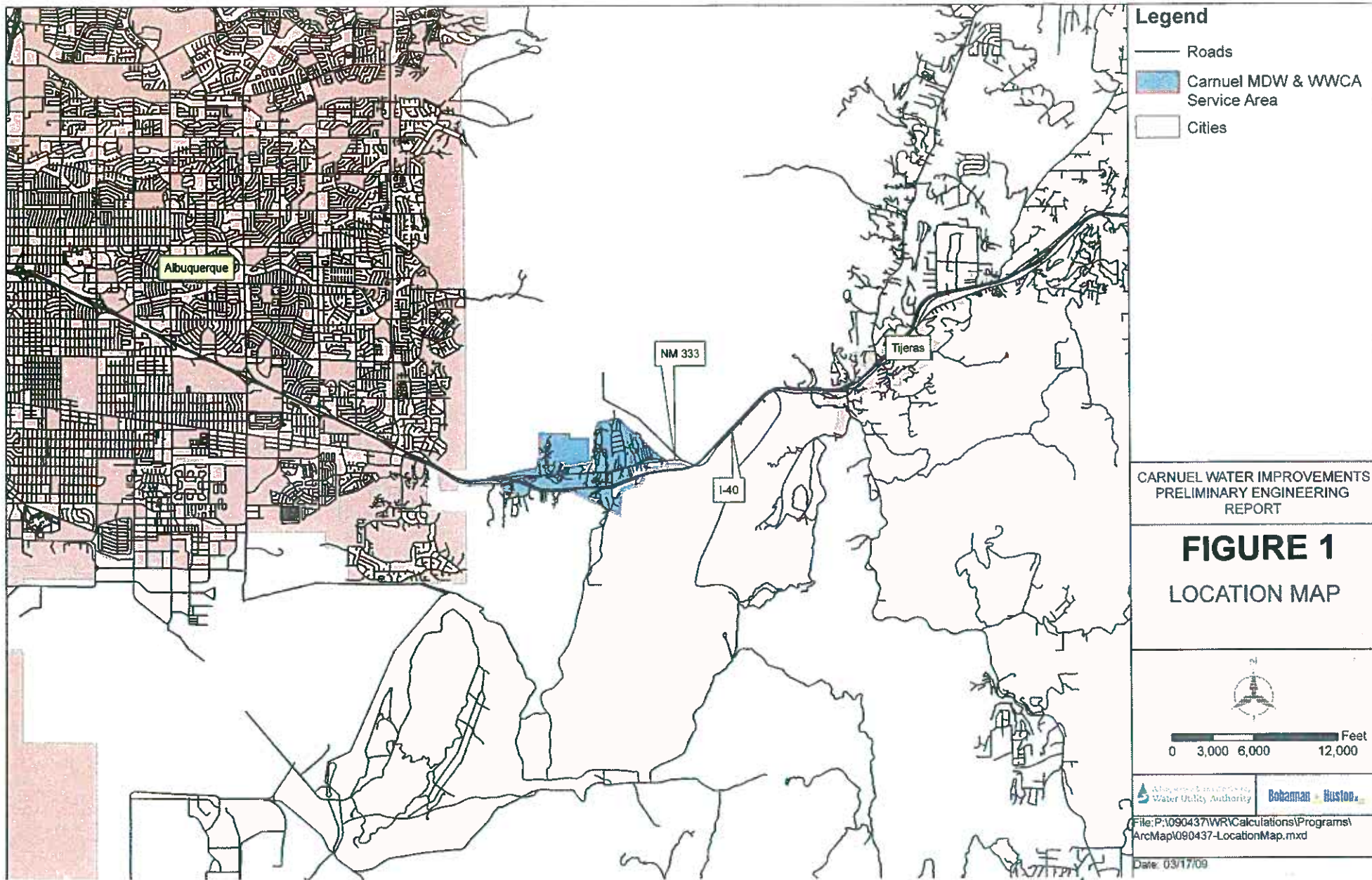


Appendix A

Maps and Figures



Legend

- Roads
- Carnuel MDW & WWCA Service Area
- Cities

CARNUEL WATER IMPROVEMENTS
PRELIMINARY ENGINEERING
REPORT

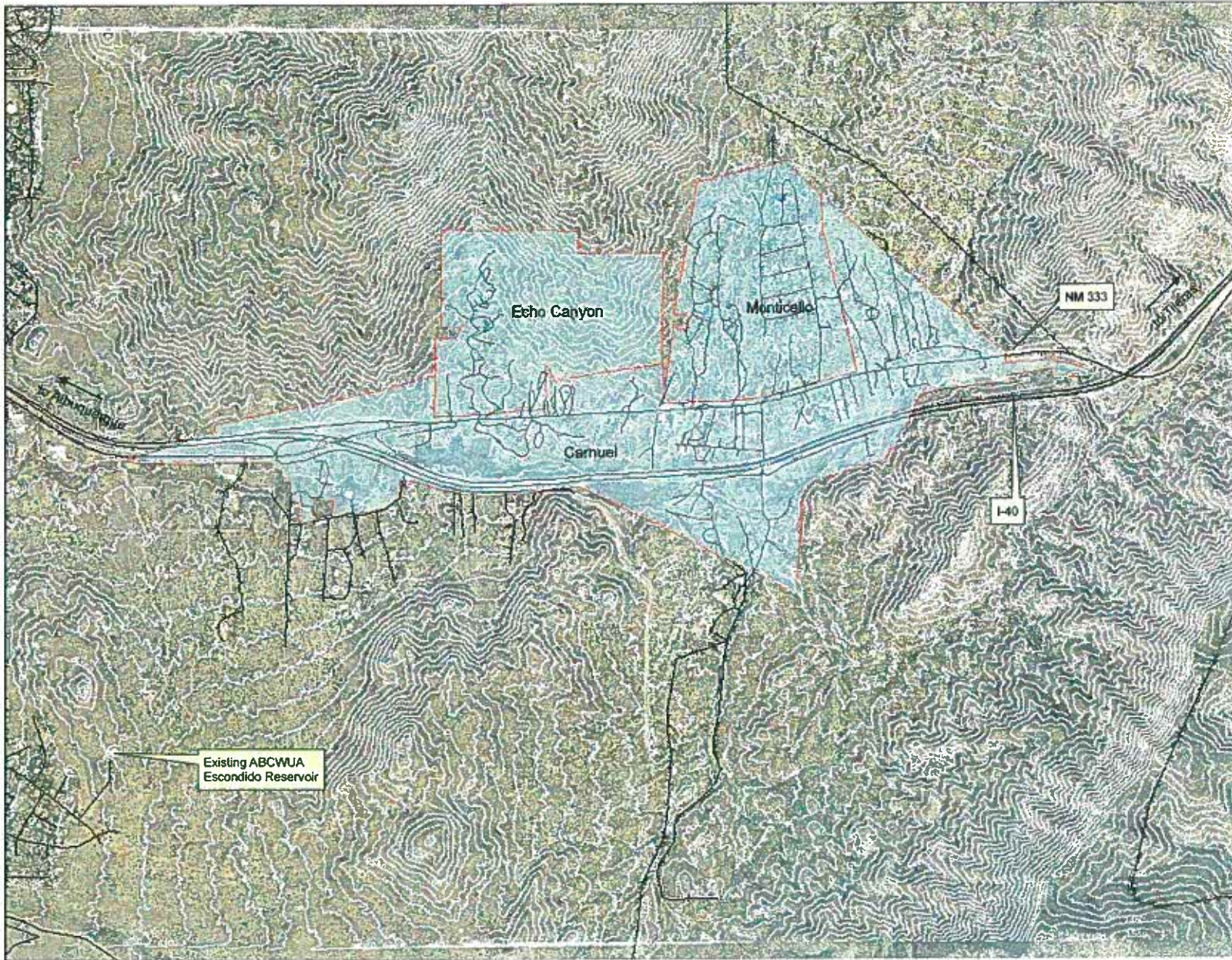
FIGURE 1
LOCATION MAP



Albuquerque Water Utility Authority **Bohannon + Huston**

File: P:\090437\WR\Calculations\Programs\ArcMap\090437-LocationMap.mxd

Date: 03/17/09



- Legend**
- Roads
 - Carnuel MDW & WWCA Service Area
 - 50-ft Contours

CARNUEL WATER IMPROVEMENTS
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FIGURE 2
**PROJECT PLANNING
AREA**

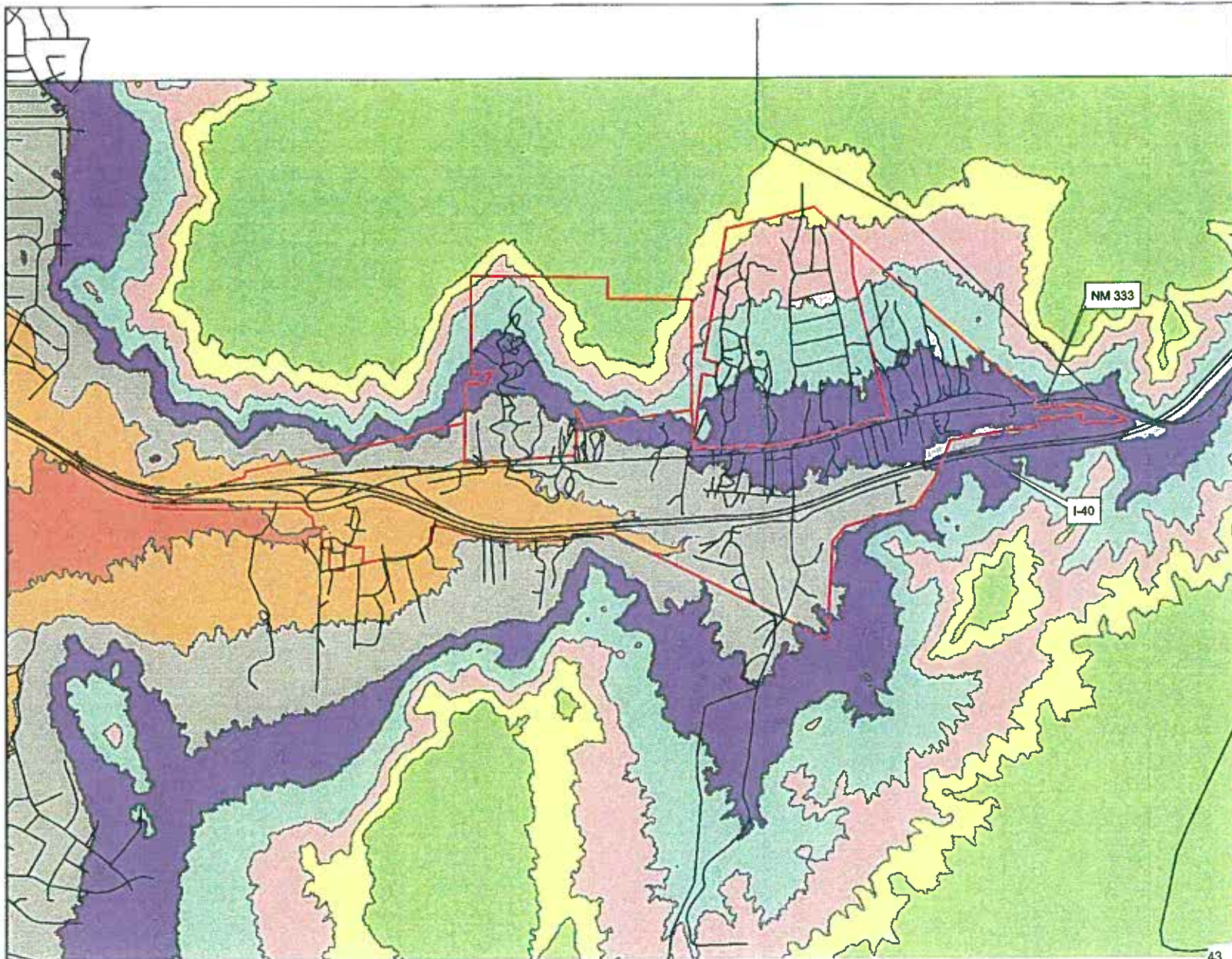


0 750 1,500 3,000 Feet

Water Utility Authority **Bohannon Huston**

File: P:\090437\WR\Calculations\Programs\ArcMap\090437-ProjectPlanningArea.mxd

Date: 03/17/09



Legend

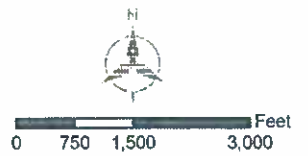
- Roads
- ▭ Carnuel MDW & WWCA Service Area

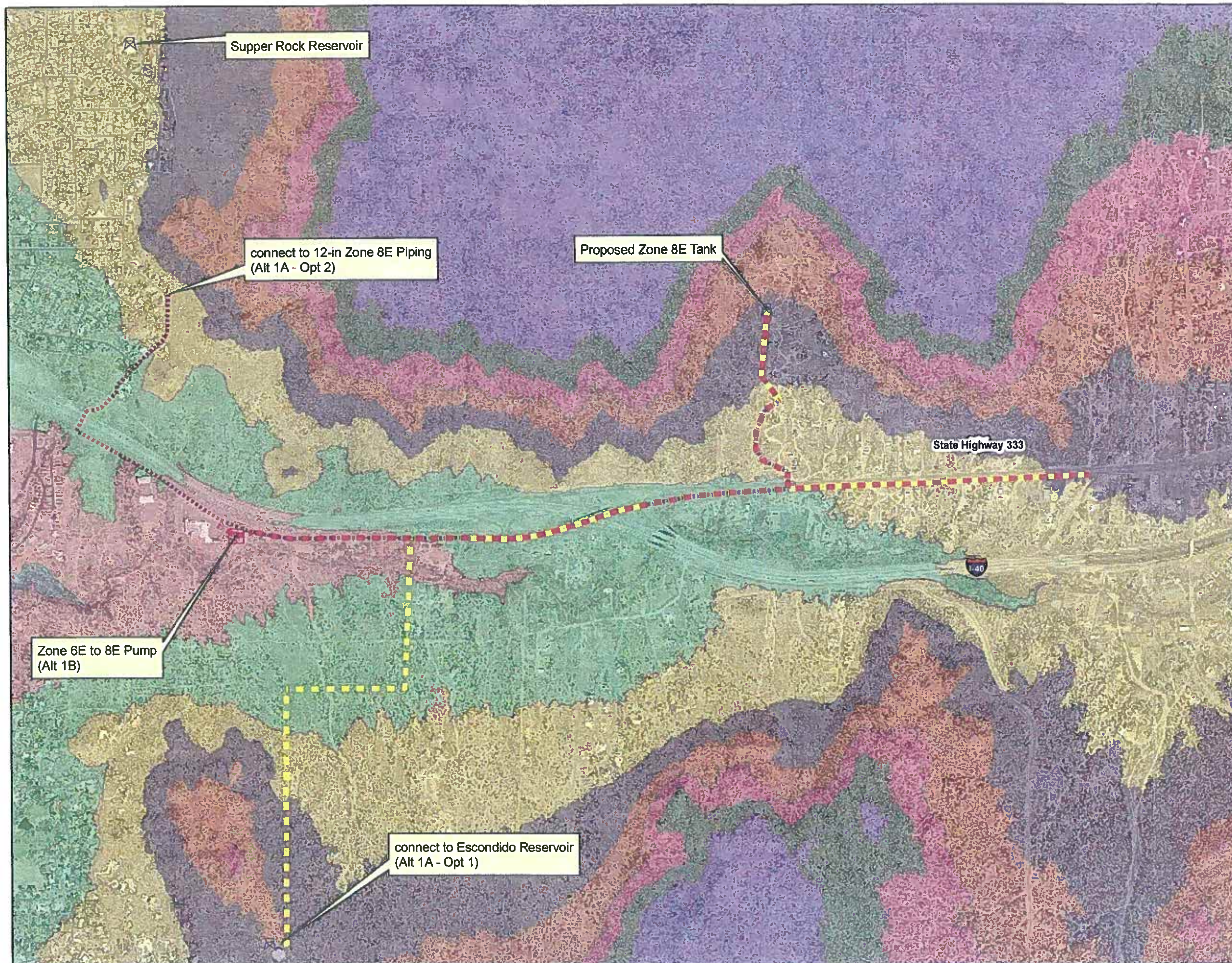
PRESSURE ZONE

- 5E
- 6E
- 7E
- 8E
- 9E
- 10E
- 11E
- 12E
- 13E

CARNUEL WATER IMPROVEMENTS
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FIGURE 3
PRESSURE
DISTRIBUTION
ZONES





Legend

- Alternate 1A - Option 1
- Alternate 1A - Option 2
- - - - - Alternate 1B

zone

- 10E
- 11E
- 12E
- 13E
- 5E
- 6E
- 7E
- 8E
- 9E

CARNUEL WATER IMPROVEMENTS
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FIGURE 4
Proposed Water
System Improvements

ALTERNATE 1

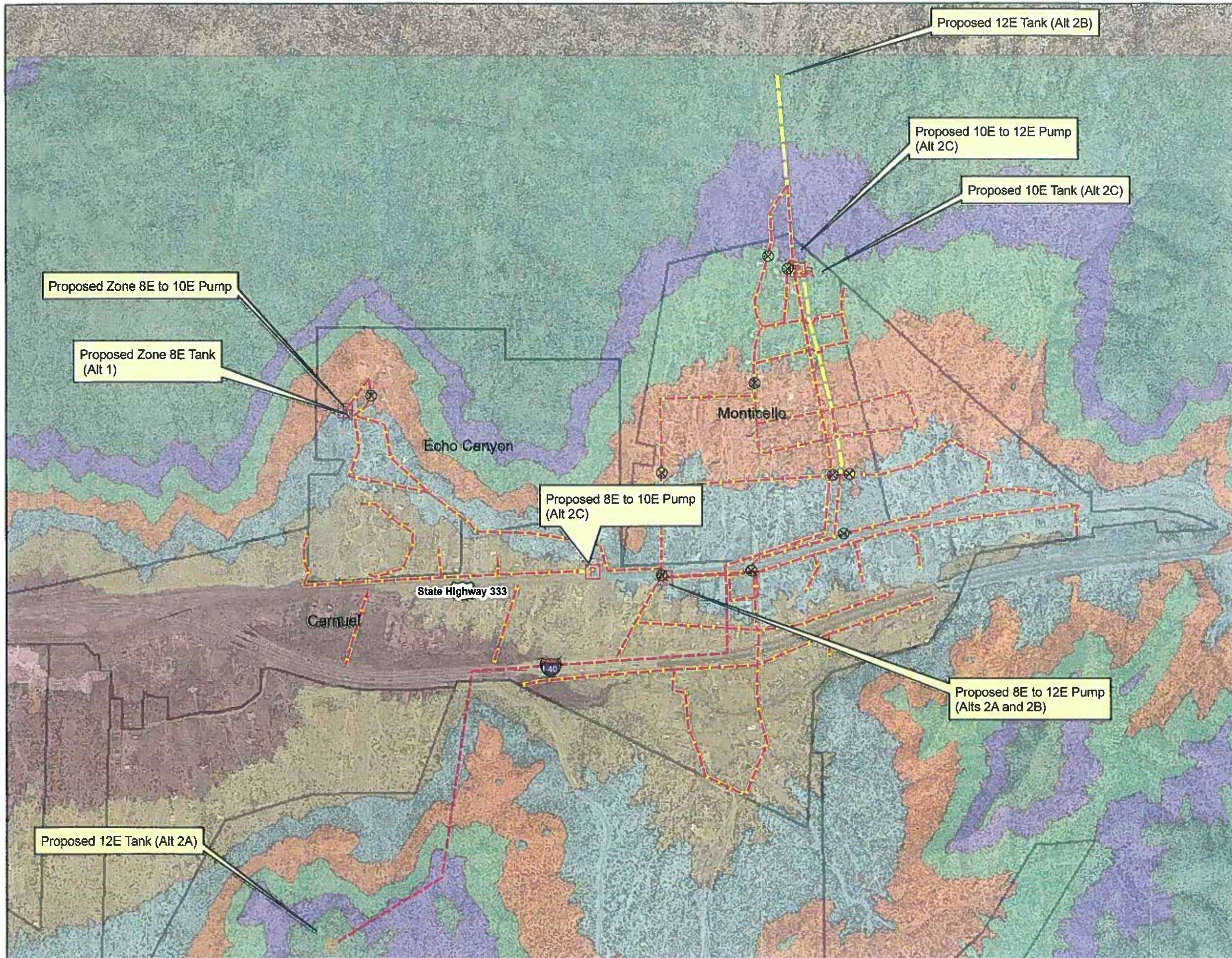


Albuquerque Bernalillo County
Water Utility Authority



File: P:\090437\WR\Calculations\Programs\
ArcMap\090437-LandOwnership.mxd

Date: 03/18/09



Legend

- - - Alternate 2A
- - - Alternate 2B
- - - Alternate 2C
- ⊗ PRVs

zone

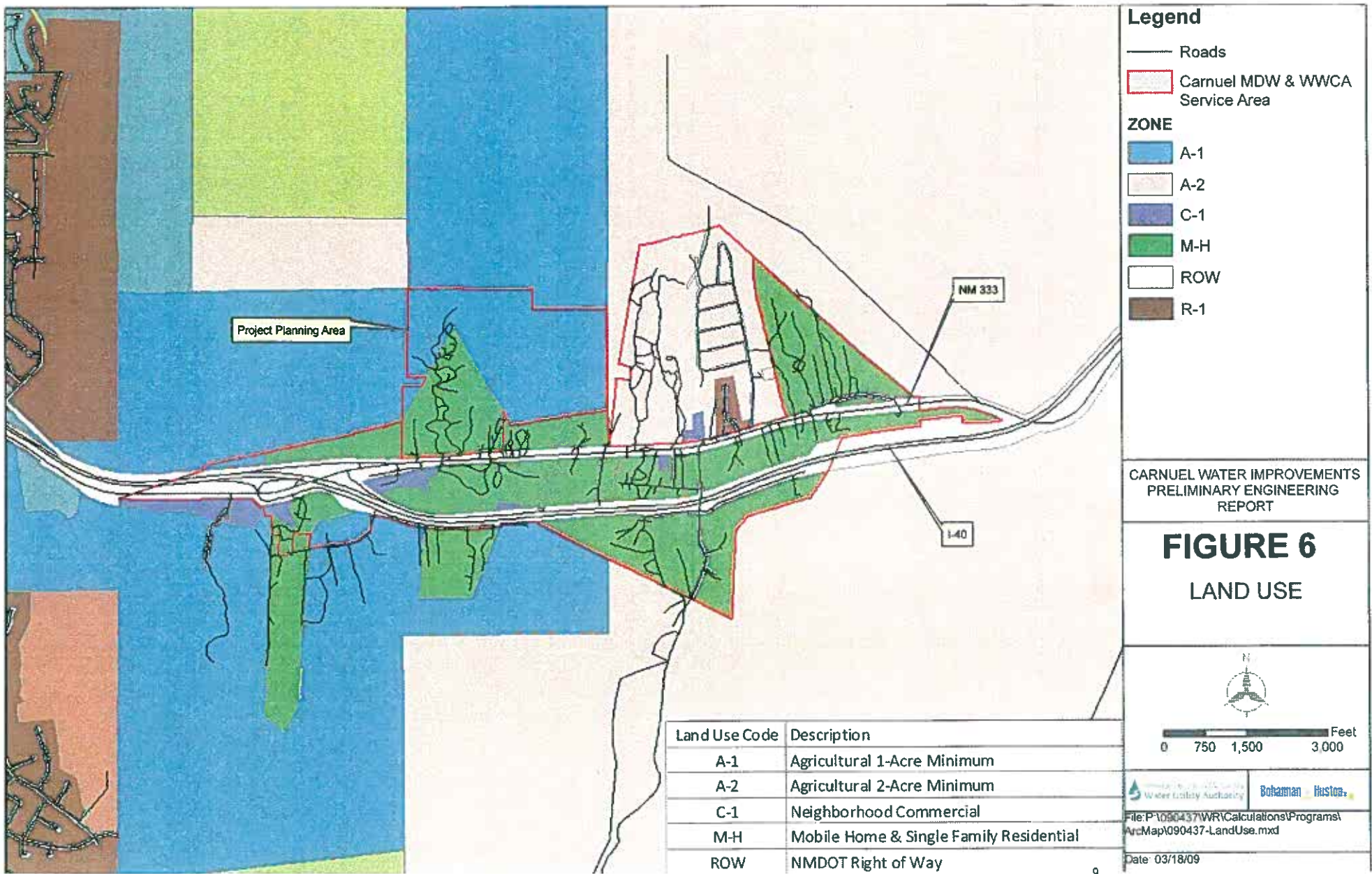
- 10E
- 11E
- 12E
- 13E
- 5E
- 6E
- 7E
- 8E
- 9E

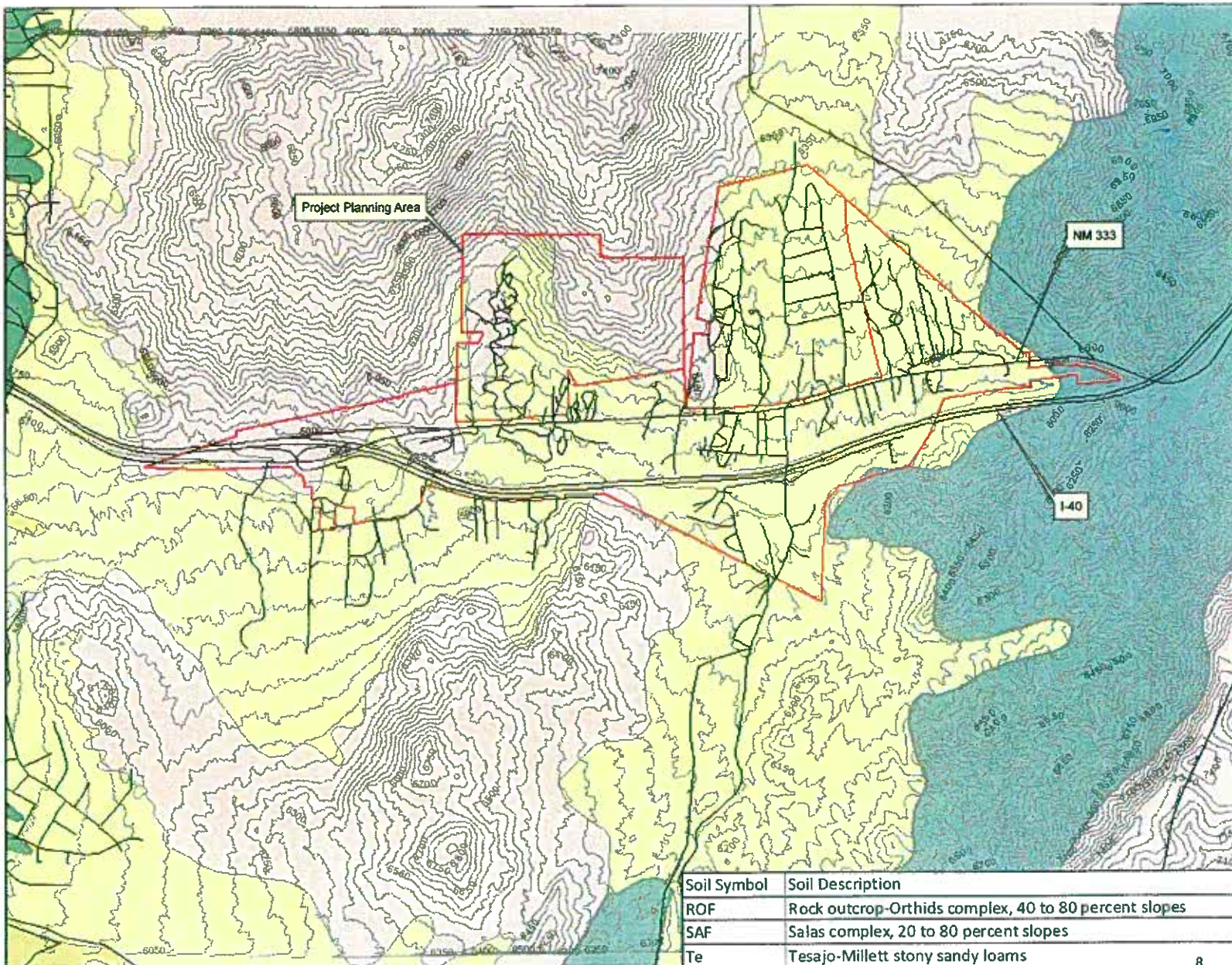
CARNUEL WATER IMPROVEMENTS
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FIGURE 5
Proposed Water
System Improvements

ALTERNATE 2







Legend

- Roads
- Carnuel MDW & WWCA Service Area

SOIL SYMBOL

- ROF
- SAF
- Te
- 50-foot Contours

CARNUEL WATER IMPROVEMENTS
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FIGURE 7
BERNALILLO
COUNTY
SOIL SURVEY

N

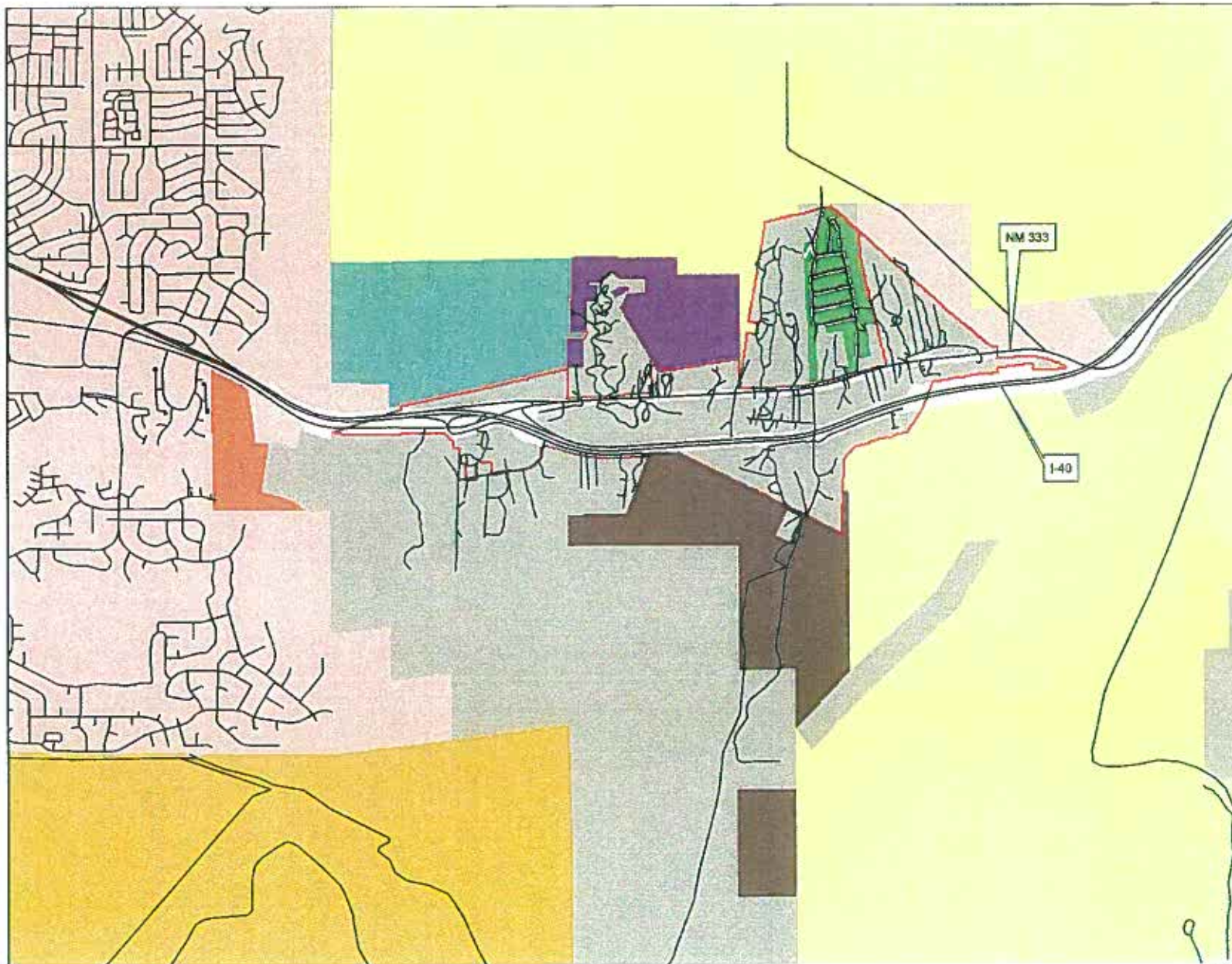
0 750 1,500 3,000 Feet

Waters Utility Authority **Bohannon Ruston**

File: P:\090437\WRI\Calculations\Programs\ArcMap\090437-SoilSurvey.mxd

Date: 03/17/09

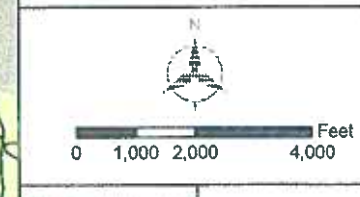
Soil Symbol	Soil Description
ROF	Rock outcrop-Orchids complex, 40 to 80 percent slopes
SAF	Salas complex, 20 to 80 percent slopes
Te	Tesajo-Millett stony sandy loams



- Legend**
- Roads
 - Carnuel MDW & WWCA Service Area
 - US Government/KAFB
 - US Forest Service
 - Coyote Springs
 - Private/Unknown
 - City of Albuquerque
 - Regents of UNM
 - Proposed City of Albuquerque Open Space Purchase
 - Echo Canyon Estates
 - Monticello

CARNUEL WATER IMPROVEMENTS
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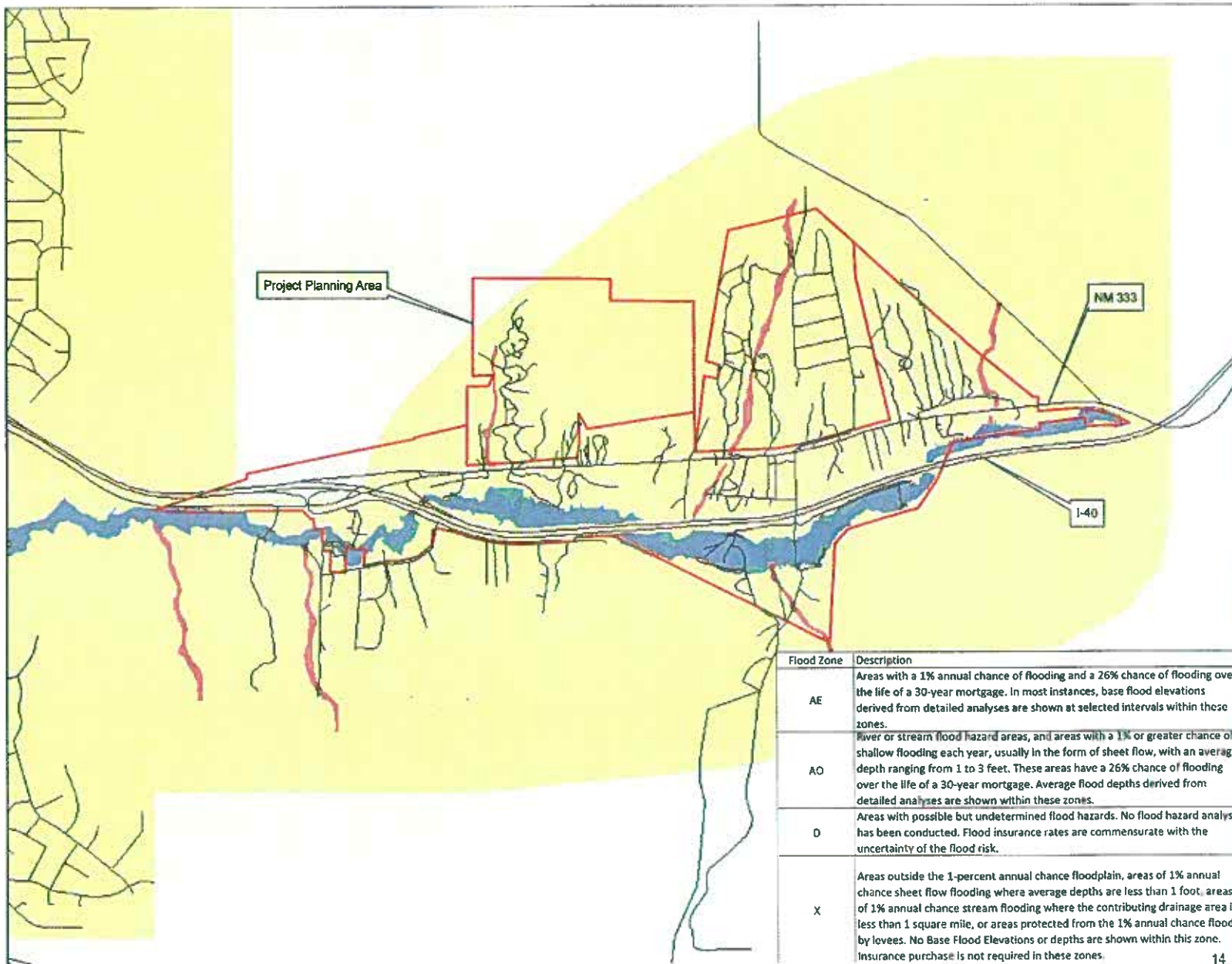
FIGURE 8
LAND OWNERSHIP



Waters Utility Authority | Bohannon - Boston

File: P:\090437\WIR\Calculations\Programs\ArcMap\090437-LandOwnership.mxd

Date: 03/18/09



Legend

- Roads
- ▭ Carnuel MDW & WWCA Service Area

FLOOD ZONE

- ▭ 0.2 % Annual Chance Flood Hazard
- ▭ AE
- ▭ AO
- ▭ D
- ▭ X

CARNUEL WATER IMPROVEMENTS
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FIGURE 9
FEMA FLOODPLAINS

Flood Zone	Description
AE	Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. In most instances, base flood elevations derived from detailed analyses are shown at selected intervals within these zones.
AO	River or stream flood hazard areas, and areas with a 1% or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Average flood depths derived from detailed analyses are shown within these zones.
D	Areas with possible but undetermined flood hazards. No flood hazard analysis has been conducted. Flood insurance rates are commensurate with the uncertainty of the flood risk.
X	Areas outside the 1-percent annual chance floodplain, areas of 1% annual chance sheet flow flooding where average depths are less than 1 foot, areas of 1% annual chance stream flooding where the contributing drainage area is less than 1 square mile, or areas protected from the 1% annual chance flood by levees. No Base Flood Elevations or depths are shown within this zone. Insurance purchase is not required in these zones.

N

Feet
0 750 1,500 3,000

Water Quality Authority **Bohannon • Huston**

File: P:\090437\WR\Calculations\Programs\ArcMap\090437-FEMAMap.mxd
Date: 03/17/09