



*State of New Mexico*  
**ENVIRONMENT DEPARTMENT**

*Rio Rancho Field Office*  
224 Unser Blvd SE, Suite B  
Rio Rancho, New Mexico 87124  
Telephone (505) 892-4483  
Fax (505) 892-4816

[www.nmenv.state.nm.us](http://www.nmenv.state.nm.us)



**RON CURRY**  
SECRETARY  
**ANA MARIE ORTIZ**  
DIRECTOR

**BILL RICHARDSON**  
GOVERNOR

August 16, 2004

Brad Stebleton  
Sandoval County Planning & Zoning  
P.O. Box 40  
Bernalillo, New Mexico 87004

Re: Apache Mesa Subdivision

Dear Mr. Stebleton:

The completed proposed package on the referenced development and your request for review and comment was received in this office of the New Mexico Environment Department.

Description


Apache Mesa Subdivision is located within Section 35 of T13N, R4E approximately 4 miles west of the Village of Placitas on the south side of New Mexico Highway 165. Approximately 45.63 acres will be subdivided into 36 lots. The lots will range from 1.00 to 1.62 acres.

Water Quality

The subdivider is proposing the use of shared well associations. Apache Mesa Subdivision will drill and equip one well for every 2-3 lots. The lot owners will be required to sign an agreement to become members of the well association to establish fees and provide maintenance.

A water quality analysis of water samples obtained from a well located in the proposed subdivision has been submitted as representative of the ground water quality available at the subdivision. The water did not exceed any MCL (Maximum Contaminant Level) set for the primary (health related) and secondary (esthetic related) parameters. The subdivider is capable of providing drinking water that is of acceptable quality for human consumption.

The concentration of arsenic was reported at 11 parts per billion (ppb). Because of health concerns, EPA revised the standard from 50 ppb to 10 ppb on January 22, 2001. Two categories



Brad Siebleton  
August 16, 2004

Page 2 of 2

of public water systems will be required to reduce the arsenic concentration to 10 ppb by January 23, 2006. The subdiviver is proposing the use of private individual wells, a category that is not regulated.

Liquid Waste Disposal

The subdiviver is proposing the use of individual liquid waste systems (septic tank systems) provided by the lot purchaser. Soils, topographic, and drainage information has been submitted to show the suitability of the site for the installation and functioning of septic tank systems (septic tank/absorption field). Based on this information the subdiviver's proposal concerning liquid waste disposal facilities can be fulfilled by the lot purchaser.

Installation of on-site liquid waste systems permitted pursuant to the Environmental Improvement Board's Liquid Waste Disposal Regulations (20.7.3 NMAC) in areas with steep slopes, bedrock, or fast percolating soils may require site modification and/or the use of alternative systems designed by a professional engineer.

Solid Waste Disposal

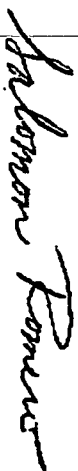
The subdiviver is proposing lot owners responsibility for offsite disposal of solid wastes by subscription to a private refuse collection/disposal service provided by Waste Management. Documentation of the availability of refuse collection/disposal service has been submitted.

Use of a private refuse collection/disposal service by the lot purchaser is sufficient to fulfill the solid waste disposal requirements of the subdivision. The lot purchaser can fulfill the subdiviver's solid waste disposal proposal.

The preceding comments and opinions on the water quality, liquid waste disposal, and solid waste disposal proposals for the proposed Apache Mesa Subdivision were made in response to a request by the County of Sandoval as provided for in the New Mexico Subdivision Act. The comments and opinions are not a recommendation for or an endorsement of the proposed subdivision by the New Mexico Environment Department.

If I can be of further assistance in this matter, please do not hesitate to contact me.

For the Department,



Salomon Romero  
Staff Manager

Cc: Consumer Protection Division, Office of the Attorney General  
Apache Mesa, LLC  
Drinking Water Bureau  
File



United States Forest Cibola National Forest 2113 Osuna Road, NE, Suite A  
Department of Service and National Grasslands Albuquerque, NM 87113-1001  
Agriculture (505)346-3900 FAX: 346-3901

File Code: 5500

Date: June 7, 2004

SANDOVAL  
COUNTY  
RECEIVED

JUN 0 8  
2004

Mr. Brad Stebleton  
Senior Planner  
Sandoval County Planning & Zoning Department  
P.O. Box 40  
Bernalillo, NM 87004

Dear Mr. Stebleton:

P&ZDEPIA

On May 21, 2004 we received the preliminary documents for the Apache Mesa subdivision in the Placitas area. As this development borders on the National Forest, we greatly appreciate the opportunity to review and comment on this project. To that end, we have the following comments and requests.

1. Protect all 3 existing brass caps. We noted that the surveyor showed only one of the brass caps. Attached is a plat of the adjoining National Forest section, T 12 N R 4 E section 2, showing the common line between the National Forest and the subdivision. All three brass caps are shown.
2. Please show the National Forest boundary on the subdivision plat.
3. We request that the setbacks outlined in the Restrictive Covenants be adhered to and that no variances along the National Forest boundary are granted.
4. We request that Forest Development Road 445 be protected. The right-of-way is shown on the plat of section 2 that is attached.
5. Please show FDR 445 on the subdivision plat.
6. Protect the Forest boundary fence in place. If the developer wishes to rebuild the fence, he must coordinate his request with the Sandia District Ranger in Tijeras. Private walls are to be built on individual lots, not replace the boundary fence.
7. All public access to the National Forest is adequately provided for using FDR 445 and the existing trailhead and parking area. No new easements will be issued.
8. Please include in the Disclosure Statement a section dealing with access to the National Forest. No gates or trails will be permitted through the forest boundary fence.

Again, thank you for the opportunity to review and comment on this proposed subdivision. It is possible to protect the wildland-urban interface through careful planning of developments. If

Mr. Brad Stebleton

2

you have any questions, please contact either Sue McHenry, Forest Lands Specialist, at 346-3900 or Don Hall, Sandia District Lands Staff, at 847-2990.

Sincerely,

  
LIZ AGPAOA  
Forest Supervisor

Enclosure

cc: Donald L Hall, Mary E Bean, Doug Williams

PRIVATE

Sec 34

Sec 35

LAND EXHIBIT "A"

T 13 N, R 4 E  
T 12 N, R 4 E

N.A.D. 1927  
UT 349118.37M  
LONG. 106°29'10.66"W

1/4 Corner Sec. 35

1/4 Corner Sec. 2

FOR TR 559-041E 328'

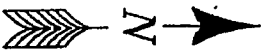
BEARING ROW

N.M. State Highway 165  
Fence Line

The described Right-of-Way is 14,300 feet in length with a constant width of 15 feet each side of centerline, and contains 9.87 acres.

**BASIS OF BEARING**  
The bearing of this survey are based on differentially corrected GPS data using the WGS 84 datum.

CIBOLA



Sec 3

Sec 2

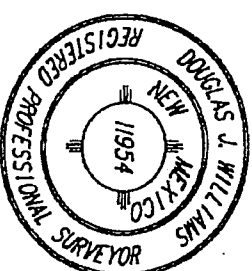
NATIONAL

BERNALILLO WATERSHED  
RESEARCH NATURAL AREA

This plot is "EXHIBIT A" to the easement from the United States of America to the College Family Road Association, for Road 445, Forest Road Easement, as it exists on May 1, 1995.

Sec 10

Sec 11



**SURVEYOR'S CERTIFICATE**  
I, Douglas L. Williams, JORS No. 11954, do hereby certify that this plot, represents a survey conducted by me or under my direct supervision during April and May of 1995, at the request of the US Department of Agriculture, Forest Service, and that it meets the standards for land surveys as hereinafter set forth by the Board of Registration for Professional Engineers and Surveyors.

*Douglas L. Williams*  
Douglas L. Williams  
New Mexico Professional Land Surveyor No. 11954  
Date 5-1-95

U. S. DEPARTMENT OF AGRICULTURE  
FOREST SERVICE  
SOUTHWESTERN REGION  
CIBOLA NATIONAL FOREST

FOREST ROAD EASEMENT, FDR 445  
SECTIONS 2, 3, 10 and 11  
T. 12 N., R. 4 E., N.M.P.M.  
SANDOVAL COUNTY, NEW MEXICO

THIS SURVEY WAS MADE AT MY REQUEST AND ACCEPTED FOR NATIONAL FOREST MANAGEMENT PURPOSES.  
*Katherine C. Carter*  
Katherine C. Carter DATE: 5/1/95  
FOREST SUPERVISOR

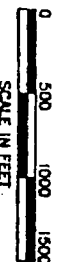
DRAWN BY: DMW  
CHECKED: DMC  
SHEET 1 OF 1

**LEGEND**

- X-X-FENCE LINES
- - - RESEARCH NATURAL AREA BOUNDARY
- B.M. BENCH MARKS
- ⊠ PERMANENT SURVEY POINT PROVISIONS SURVEYED 15 / 1995
- N.O.S. VERTICAL LETTERING - RESTORATION CUTS
- N.E.S. SLANT LETTERING - ACCRUE CUTS

**NOTES:**

Research Natural Area boundary is set back 100 feet inside FRO 445.  
N.A.D. 1927 coordinates are from the record 1991 B.L.M. plat of Sections 1 and 2, T. 12 N., R. 4 E., N.M.P.M.  
The Right-of-Way lines to be shortened or lengthened to terminate on the property lines.





**Bernalillo Public  
Schools**

224 N. Camino del Pueblo  
Bernalillo, NM 87004

**Gary L. Dwyer, Ed.D**  
*Superintendent*

Phone: (505) 867-2317  
bernalillo.bps.k12.nm.us

**Board of Education**  
Lorenzo Tafuya

Jack Torres  
Errol Chavez  
Ray Trujillo  
Nancy Walker

**Deputy Superintendent**  
Ivachbeque

May 5, 2004

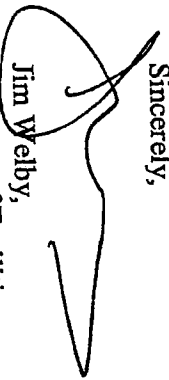
Joseph D. Montano  
Senior Planner  
D. Mark Goodwin & Associates, P.A.  
P.O. Box 90606  
Albuquerque, Nm 87199

Dear Mr. Montano:

Gary Dwyer received your letter of May 3, 2004 regarding the proposed Apace Mesa Subdivision and asked that I review your preliminary draft of the project. We noted your intention to pave the internal streets, that there was ease of access for buses coming and going into the area, and that all weather roads will be available for school buses.

Thank you for the opportunity to review the scope and nature of the project. The safety of our students is always our primary concern and your draft appears to have met this objective as well. We look forward to watching the Subdivision develop. Best wishes on your endeavor.

Sincerely,



Jim Welby,  
Director of Facilities

Cc Gary Dwyer, Superintendent



**SANDOVAL COUNTY  
FIRE MARSHAL'S OFFICE**

**"MEMORANDUM"**

**Date: May 21, 2004**

SANDOVAL COUNTY  
RECEIVED

**MAY 21 2004**

P&Z DEPT.

**To: Joseph D. Montano  
Senior Planner**

**Ref: Apache Mesa Sub Division**

In reviewing your attached plans, and remembering the verbal discussion we had several days ago, I do not see any dedicated location for a water storage tank, nor the gallons to be in said tank.

Even though each home will be sprinklered under NFPA-13 there still needs to be a water supply available for fire protection as there can be grass fires, outside structure fires and mop up required in homes with sprinklers..

Please contact me with additional information as to the location and size of the proposes water tank.

I commend your group for implementing sprinklers in each of the new homes proposed for this location.

Please feel free to contact me at 867-0245 .

*Clark Speakman*  
**Clark Speakman "Sparkie"**

**Fire Marshal**

**cc: P&Z**



SANDOVAL COUNTY ADMINISTRATIVE OFFICES

BOARD OF COUNTY COMMISSIONERS

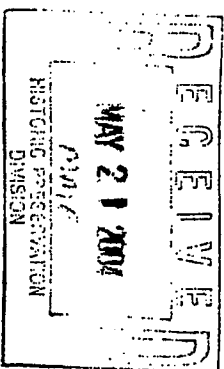
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District 3  
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District 4  
ELIZABETH C. JOHNSON  
District 5

May 21, 2004

07-1178

DEBBIE HAYS  
County Manager

Katherine Slick, Director  
Office of Cultural Affairs  
Historic Preservation Division  
228 East Palace Avenue  
Santa Fe, NM 87501



Dear Ms. Slick:

Enclosed are relevant documents regarding Apache Mesa, a proposed Type Two Subdivision. The subdivision proposal is for 36 lots on approximately 45.63 acres located in Section 35, Township 13 North, Range 4 East, NMPM, in the western portion of Placitas, Sandoval County, New Mexico. I hereby request that your agency review this subdivision proposal with comment as soon as you are able.

If you have any questions regarding this or any other related matter, please do not hesitate to contact me at (505) 867-7628 or by writing me c/o Sandoval County Planning & Zoning Department P.O. Box 40, Bernalillo, NM 87004.

Sincerely,

*Brad Stebleton*

Brad Stebleton,  
Senior Planner

Enclosures

No Historic Properties Affected.

*ce/30for*

*Michelle Eusey*  
Historic Preservation Officer  
for NMSHP

*HPO concurs with the archaeologists' recommendation that archaeological site LA 143260 is not eligible for listing to the State or National Register. It is HPO's opinion that the development proposed with construction.*

JUL 02 2004

P&Z DEPT.





*New Mexico* DEPARTMENT OF  
**TRANSPORTATION**  
HONOLULU FOR PEARDONE

DISTRICT THREE OFFICE

January 26, 2004

Mr. Terry O. Brown, P.E.  
P.O. Box 92051  
Albuquerque, NM 87199-2051

Subject: **Traffic Impact Analysis for the Proposed Apache Mesa Subdivision,  
NM 165 Approximately MP 2.125 & 2.384 (Driveways "A" & "B")**

Dear Mr. Brown:

The District Traffic Section has reviewed the Traffic Impact Analysis (T.I.A.) for the subject development, submitted by your office. The trip generation data appears reasonable for the proposed Apache Mesa Subdivision consisting of thirty-four (34) Single Family Detached Dwelling Units.

Your report indicates that an eastbound right turn deceleration lane at Driveway "A" and a westbound left turn deceleration lane at Driveway "B" are warranted for the two proposed driveways along NM 165. The District concurs with your recommendations and they shall be constructed according to the State Access Management Manual.

The following information will be required prior to approving the requested driveway access:

- Site grading and drainage plans approval
- Construction plan and details
- Traffic Control Plan (T.C.P.) to be used during construction activities
- Cultural resources approval for disturbance to the State right-of-way
- Driveway Permit Applications

If you have any questions, please contact this office at (505) 841-2771.

Sincerely,

*Mu A. Amiri*

Mir A. Amiri, P.E. & P.S.  
Assistant District Traffic Engineer

cc: Tom Raught, District Engineer  
Tony Abbo, District Traffic Engineer

Julian A. Vigil, Permit Agent

District Three P.O. Box 91750 Albuquerque, NM 87199-1750

Bill Richardson  
Governor

Rhonda G. Faught P.E.  
Cabinet Secretary

Commission

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Commissioner  
District 3

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Commissioner  
District 4

Bud Hettig  
Commissioner  
District 1

REVIEW OF TERRAIN MANAGEMENT SUFFICIENT TO  
PROTECT AGAINST FLOODING, INADEQUATE DRAINAGE  
OR EROSION FOR AND DURING THE DEVELOPMENT OF APACHE MESA,  
A PROPOSED SUBDIVISION ON 45 ACRES, LOCATED  
WITHIN SECTION 35, TOWNSHIP 13 NORTH, RANGE 4 EAST,  
SANDOVAL COUNTY, NEW MEXICO.

Prepared by

Gregory A. Smestad

SANDOVAL COUNTY  
RECEIVED

JUN 17 2004

Prepared For

P&Z DEPT.

*Coronado Soil & Water Conservation District*

*P.O. Box 69*

*Bernalillo, New Mexico 87004*

June 17, 2004

Brad Stebleton, Senior Planner  
Sandoval County Planning and Zoning  
P.O. Box 40  
Bernalillo, NM 87004

**SUBJECT:** Apache Mesa subdivision proposal

The Coronado Soil and Water Conservation District has reviewed the subdivision submittal for Apache Mesa Subdivision. The proposal is for a 36 lot subdivision on 45 acres located within section 35, Township 13 North, Range 4, Sandoval County, New Mexico. Our comments and opinions are based on a site visit and review of submittal.

The subdivider proposes developing the land into 36 single-family lots. Lot size ranges from 1 to 1.62 acres. The subdivision is accessed from State Road 165 through two proposed new roads. Total number of new roads created: 4 plus 223 foot by 20 foot wide easement. Approximate total length of all new roads: .57 miles. Total combined surface area for all proposed roads is approximately 1.63 acres or about 4% of the total acres. All roads will be paved.

**SUMMARY**

Apache Mesa is intersected by a major arroyo flowing in the direction towards the Rio Grande. The main area of concern is the peak flow and volume of water that can potentially occur through Apache Mesa Subdivision. However, the vast majority of these peak flows are generated off-site. Of the 1,062 cfs (cubic feet per second) 100 year storm event flow rate immediately downstream from the site, 970 cfs are generated off-site (before reaching the

Apache Mesa Subdivision). Only 92 cfs (or 9%) are generated on-site during a 100 year storm event before development. The fully developed site has the potential of producing an additional 35 cfs.

Keeping the flows after development to a minimum is very important as the arroyo continues to flow through existing and proposed developed areas. General guidelines, advice, recommendations and data are offered through Covenants, Conditions and Restrictions, Disclosure Statement: section 26 and 27, Exhibit E and Terrain Management portions of this proposal to keep on-site generated flow after development from exceeding pre-development on-site generated flow.

The terrain management portion of this submittal states that a community pond is an option – as apposed to individual water retention techniques – for assuring that historical flow rates are not exceeded. The Coronado Soil and Water Conservation District recommends that the community pond option is removed from the plan. Individual lot water retention techniques offer more options for putting retained water to beneficial use and are easier to maintain. Also there is no design or proposed site for a community retention pond.

The proposal prohibits any development within the 100-year flood zone, Disclosure Statement section , 12 - B and 26 - E. The district believes this is a good practice. However, the Architectural Control Committee (ACC) has the option of approving development in drainage easements, Declaration of Protective Covenants, Conditions and Restrictions (CCR), 5.22, and Disclosure Statement 12 - B. The District recommends no development be allowed in drainage easements.

Additionally, the Discloser Statement, section 26 – F., has a typographical error. The third sentence should read: “Additionally, The following lots have a portion of the lot with a slope of 25% or greater: (Lots 1, 2, 3, 15, 16, 24, 25, 26, 27, 28, 29, 30, 31 and 32).” Currently the sentence states the slope is only 8%. Also, maps depicting the 25% or greater slope areas are not properly labeled as such. The District recommends that this typographical error and maps be corrected.

With action taken on the above recommendations, The District believes the portion of the Terrain Management Plan that applies to the developer and the future lot owners is sound and will provide terrain management sufficient to protect against flooding, inadequate drainage or erosion for and during the development of Apache Mesa Subdivision.

### **General Comments**

Oversight of terrain management sufficient to protect against flooding, inadequate drainage or erosion for and during the development of the proposed 36 lots, is placed on the Architectural Control Committee as defined in Apache Mesa Subdivision, Comprehensive Declaration of Covenants, Conditions and Restrictions, Article 4. The lot owner must submit a detailed development plan along with a non-refundable \$500 fee to the ACC, and such plan must be approved in writing prior to the commencement of construction of any improvement.

Therefore, the effectiveness of terrain management through General guidelines, advice, recommendations and data offered through Covenants, Conditions and Restrictions, Disclosure Statement, and Terrain Management portions of this proposal pertaining to future lot owners shall be determined by the effectiveness of the ACC.

### **Soils**

No soils map using USDA Natural Resources Conservation Service Soil Survey is included in the submittal. However a Geotechnical Engineering Services Report is included. Eighteen test borings were logged – however the map is not detailed enough to correlate the borings with the proposed lots.

The soil types found on this 45 acre site are all susceptible to accelerated erosion if appropriate terrain management practices are not implemented. The Disclosure Statement states that purchaser should consult a geotechnical engineer regarding soils properties, slope and their relationship to development.

### **Slope**

All lots have portions of terrain with slopes 8% or greater. Additionally, The following lots have a portion of the lot with a slope of 25% or greater: 1, 2, 3, 15, 16, 24, 25, 26, 27, 28, 29, 30, 31 and 32. Consideration must be given to the slope when designing the required detailed development plan as to not accelerate erosion.

### **Natural Drainage**

For the most part, the proposed lots in the Apache Mesa subdivision have been platted to avoid excessive run-off from one lot to another. This is a good terrain management practice that the District supports. Where this is unavoidable, Consideration must be given to the natural drainage of these lots when designing the required detailed development plan

### **Grading, Drainage and Erosion Control**

Sandoval County subdivision regulations Appendix A. Development Plan for Placitas area of Sandoval County, section 3. I., requires that all run-off water generated through the introduction of impermeable surfaces shall be maintained on the lot. This proposal recommends a minimum volume of 660 cubic feet, or 4,937 gallons of containment space. Typically, stone-lined ponds are installed to hold the desired amount of water. The water evaporates and infiltrates, but is not put to a specific beneficial use.

The subdivider has incorporated erosion control measures into the proposal. The District is pleased that the subdivider has suggested water harvesting swales as an option to detention ponds.

- The Apache Mesa Subdivision disclosure statement and CCR requires that each lot owner provide on-site detention areas or water harvesting swales to intercept and contain all runoff from developed impermeable surfaces
- To minimize maintenance problems, installation of culverts across access roads to individual lots shall be discouraged.
- Runoff from roadways shall be diverted away from steep slopes with barriers or ditches.
- The length and steepness of newly created slopes shall be minimized (with) benching, terracing, or construction diversion structures.
- Sediment laden runoff shall be trapped in basins to allow soil particles to settle out before flows are released to arroyos.

The CCR, 5.22 lists walled courtyard areas to retain runoff. If this technique is used to detain run-off, a portion of the detained water can be used to water plantings at the edge of the wall if a mild slope is designed into the courtyard plan.

The District recommends that the subdivider, with District assistance, present further creative options, that can put run-off water to beneficial use. Below, are the District's recommendations and more options for putting water to a beneficial use. Options can include:

- Water Harvesting Cistern: This option will allow the lot owner to increase their water consumption restraints in equal proportion to the cistern storage capacity. Cistern water can be used to irrigate household garden, wash vehicles etc.
- Water Harvesting Swales: Swales will apply beneficial water to native vegetation or household garden. Where soil and slope permits, swales can be built to harvest run-off water. Swales should be included into the initial design concept for site development and terrain management.
- Seasonal Wildlife Pond: This option can be used in conjunction with other options mentioned. Run-off water will enhance wildlife habitat for birds and bats when a small lined pond is constructed and maintained.

The District recommends the following practices be implemented by the subdivider and or lot owner:

- During roadway, driveway and building pad construction, minimize the disturbance of native vegetation. Areas of disturbance shall be re-seeded with native grasses from the list provided in the "Native Grass" portion of this review.
- Re-seed all disturbed areas on slope with native grass seed using a staked jute mat or similar technique to maximize germination and minimize seed loss.

- When cutting for building pads, the excavator shall put aside all top-soil (top 6 inches) so that it can be re-distributed once the house is built on the pad. This practice can greatly help the homeowner establish native grasses, thus reducing erosion potential.

- The ACC shall encourage the construction of retaining walls or bank stabilization techniques on all cuts and benches that are higher than 24 inches.

Less un-necessary disturbance of soil and slope is best, as fewer practices are needed to address these issues.

#### **Native Grass**

Recommended native grasses mixture used for re-seeding disturbed sites include: approximately 30% Black Grama, 25% Side-Oats Grama, 25% Blue Grama, 10% Western Wheat Grass, 3% Galleta, 3% New Mexico Feather Grass, 3% New Mexico Muhly.

#### **Roads**

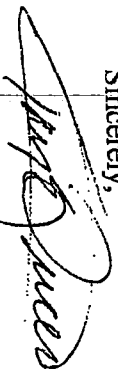
Runoff from subdivision roads will be directed to the natural drainages via roadside ditches and culverts. Soils in this subdivision are subject to water erosion once disturbed. The District is concerned with the potential for erosion in roadside ditches along the steeper sections of the roadways, especially where cutting and filling was required to build the road.

- 1) Terrace the road cuts and where benches are higher than 24 inches, construct retaining walls to reduce potential erosion.
- 2) Reseed all disturbed areas with native grass seed using a staked jute mat or similar technique to maximize germination and minimize seed loss.
- 3) Install a staked and fortified, mesh incased rip-rap blanket or energy dissipating concrete pad, at the outlets of the large culverts.

This review is provided by the Coronado Soil and Water Conservation District in response to a request by the Sandoval County Commission, as provided for by agreement and state law. The comments and opinions contained herein are only such, and do not constitute endorsement or recommendation for approval of the proposed Apache Mesa Subdivision by the District. We will be pleased to review and comment on any additional materials submitted by the subdivider.

Please do not hesitate to call me at 867-2011 if you have any questions.

Sincerely,



Tony Lucero,  
Chairman

SANDOVAL COUNTY  
RECEIVED



JUN 28 2004

STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER  
SANTA FE P&ZDEPT.

John R. D'Antonio, Jr. P.E.  
State Engineer

June 25, 2004

BATAAN MEMORIAL BUILDING, ROOM 101  
POST OFFICE BOX 25102  
SANTA FE, NEW MEXICO 87504-5102  
(505) 827-6175  
FAX: (505) 827-6138

Brad Stebleton  
Sandoval County  
P.O. Box 40  
Bernalillo, NM 87004

**CERTIFIED MAIL**  
**RETURN RECEIPT**  
**REQUESTED**

Reference: Apache Mesa

Dear Mr. Stebleton:

The Office of the State Engineer (OSE) has reviewed the subdivision proposal for the Apache Mesa Subdivision pursuant to the Sandoval County Land Subdivision Regulations (Regulations). It is the opinion of this office that, with one minor variance which this office recommends be granted, the developer's water supply proposal complies with the Regulations.

**Project**

The Apache Mesa proposal is a request to develop a 45-acre lot into a 36-lot residential subdivision. It is located in the Placitas area, on State Road 165, east of the Anasazi Trails Subdivision, in Section 35 of T13N, R4E, N.M.P.M.. The developer proposes that domestic water will be supplied to his subdivision via shared 72-12-1 domestic wells.

**Water Demand Analysis and Conservation Measures**

The developer has properly calculated the maximum annual water requirements of his subdivision as 0.5 acre-feet per year, per lot. This is consistent with the requirements set out in Section 4.BA of Appendix A of the Sandoval County Land Subdivision Regulations. Restrictions on irrigated area are specified in the disclosure statement and the covenants. These restrictions are consistent with the water requirement to ensure, to a reasonable degree, that residents will not exceed the amount of water budgeted.

**Water Supply Assessment**

The Sandoval County Land Subdivision Regulations require the developer to supply a geohydrologic report. Appendix A of the code details the minimum requirements for this report if the development proposed is in the Placitas area (as in this case). Article 8, Section 8.6.3 also outlines geohydrologic requirements.

The geohydrologic report submitted included well logs, drawdown and recovery well test data, results of 100-year schedule of effects calculation, geologic cross-sections, and water level contours. The report, dated January 9, 2004 was authored by John Shomaker & Associates.

Page 2  
June 25, 2004  
Apache Mesa Subdivision

In order to create the geohydrologic report, the consultant pump tested an on-site well, RG-81338. The test well proved to be a good producer, having minimal drawdown after pumping of up to 28 gallons per minute for 24 hours. The consultant concluded that water would be available for the 100-year period prescribed by the County. This office concurs with this opinion.

Appendix A, Section 4.B.5 of the Regulations contain minimum lot size calculation requirements. There were numerous errors made in this calculation including:

- ▶ The value used for subdivision size was low. The author used 35 acres, when the actual subdivision size is 45.6 acres.
- ▶ The saturated thickness used was higher than the author can verify. The author assumed 1000 feet of aquifer thickness. OSE recommends 350 feet of aquifer thickness be used, as several neighboring wells have encountered this much fill. The on-site well likely would have encountered this much fill if drilled deeper.
- ▶ The number of lots used in the calculations was 35, instead of the 36 listed in the main report.
- ▶ The specific yield was not properly calculated, as required, from the constant-pump test. The observation well response should have rendered this value. Published reports indicate a value of up to 0.2 could be used, instead of the 0.1 used.

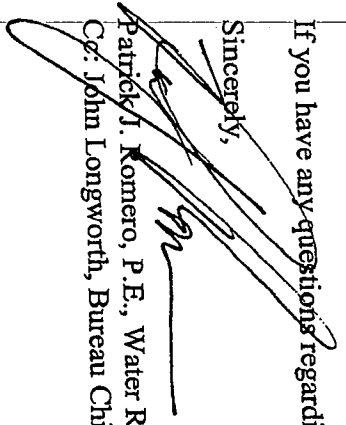
Using the corrected values, OSE staff was able to determine that the minimum lot size would be less than the smallest lot size proposed; thus, the developer is able to meet this requirement.

Due to the fact that the aquifer existing under this proposed subdivision, the Upper Santa Fe Group, is substantial in extent, and has consistently been shown to have ample water bearing properties, it is the opinion of OSE that requiring the developer to drill and test every well is unnecessary. The requirement to drill and test numerous wells is found in Appendix A, Section 4.B.5 of the Regulations.

OSE recommends that the county require that the developer create well sharing agreements prior to the plats being recorded. The assignment of person(s) responsible for submitting well records to the OSE on a quarterly basis should be included in these agreements.

If you have any questions regarding this opinion, please feel free to call me at (505) 827-6790.

Sincerely,



Patrick J. Komero, P.E., Water Resource Engineer  
Chief, John Longworth, Bureau Chief, Water Use and Conservation Bureau





*Refuse Service Proposal*  
*South Side of NM 165/ Placitas NM*

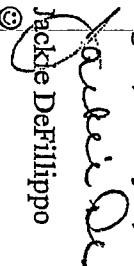
*Thank you* for this opportunity to present a total and complete refuse collection service.

Please be advised that Waste Management can service the proposed new Sub Division.

We are a WASTE MANAGEMENT Company whose sole aim is to provide the finest quality service to our customers. Our service is designed to meet you needs by assisting you. Waste Management provides service that is also flexible enough to change as your requirements change.

Please call me directly at 891 6589 when you are ready and we will take great care of your needs.

Again, thank you,

  
Jackie DeFillippo  
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