



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

November 28, 2001

Mark Goodwin, P.E.
Mark Goodwin & Assoc.
P.O. Box 90606
Albuquerque, New Mexico 87199

RE: APPLEBEE'S ON 4TH ST NW (E-15/D13)
(6308 4th st NW)
ENGINEERS CERTIFICATION FOR CERTIFICATE OF OCCUPANCY
ENGINEERS STAMP DATED 7/17/2001
ENGINEERS CERTIFICATION DATED 11/19/2001

Dear Mr. Goodwin:

Based upon the information provided in your Engineers Certification submittal dated 11/20/2001, the above referenced site is approved for Permanent Certificate of Occupancy.

If I can be of further assistance, please contact me at 924-3981.

Sincerely,

Teresa A. Martin
Hydrology Plan Checker
Public Works Department

BUB

C: Vickie Chavez, COA
✓ drainage file
approval file



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

July 26, 2001

Amy Driscoll
Mark Goodwin & Assoc.
P.O. Box 90606
Albuquerque, NM 87199

**Re: Grading and Drainage Plan for Applebee's - 4th Street,
(E15/D013) Engineer stamp dated 7/17/01, resubmitted with minor
changes from orig. plan dated 3/14/01.**

Dear Ms. Driscoll,

The above referenced plan is approved for Site Plan for Building Permit, Building Permit, and for Grading and Drainage. Please attach a copy of this plan to the construction set for Hydrology sign-off of Building Permit. As part of final inspection of the work on 4th St., please make sure that the small concrete rundowns shown on the DRC plan set are constructed and functional to drain to the drainage swale between curb and sidewalk.

Please contact Kevin Broderick for completing necessary agreements for Work Order items on the Infrastructure List prior to final Site Plan sign-off by City Engineer.

Prior to release of Certificate of Occupancy, Engineer's Certification, per the DPM checklist, of final site grading and drainage is required for final approval by Hydrology.

If you have any questions, please call me at 924-3980.

Sincerely,


Loren D. Meinz, P.E.
Hydrology Division

c: Terri Martin
File

E15/D13

Applebee's - 4th Street & Vineyard Road, Albuquerque, NM

4.0 SITE SUBSURFACE CONDITIONS

To explore the site subsurface conditions, ten test holes were drilled at the approximate locations shown on the Site Plan, Figure 1. As shown on the Logs of Test Holes, Figures 2 through 11, the soils encountered in the test holes consisted of layers of very silty sand, sandy silt, and sandy clay to depths of eight to thirteen feet. At greater depths, the test holes encountered clean sands. The soils were fine to medium grained and loose to medium dense. The upper soils were medium moist to moist and the lower soils were slightly moist. Uncontrolled fill was encountered in test holes numbered 1, 2, 4, 5, and 6 to depths between two and five feet. The fill soils were similar to the natural soils but contained a small amount of debris. Large pieces of concrete were buried on the site on the east portion of the proposed building area between test holes 3, 4, and 5.

Neither groundwater nor bedrock was encountered in the test holes to a depth of twenty-one feet, the maximum depth of exploration. However groundwater conditions may change with time due to precipitation, variations in groundwater level, seepage from ponding areas or leaking utilities.

The soil encountered in the test holes exhibit a slight consolidation potential under the anticipated structural loads. Slight to moderate additional consolidation (collapse) occurs when site soils increase in moisture content. Refer to Figures 13 through 15.

The test holes allow observation of a very small portion of the soils below the site. Significant variations in subsurface conditions may occur across the site which were not disclosed by the test holes.

5.0 LABORATORY TESTING

A laboratory-testing program was performed on samples obtained during the field investigation which appeared representative of the soils encountered in the test holes. The laboratory-testing program was structured to determine the physical properties of the soils encountered in the test holes necessary for development of geotechnical recommendations.

The laboratory-testing program included:

- Moisture Content;
- Dry Density;
- Sieve Analysis;
- Atterberg Limits; and
- Consolidation/Collapse.

Moisture Content and Dry Density tests were performed to evaluate the in-place soil density and moisture content. Test results help to evaluate settlement potential. Test results indicate the soils encountered in the test holes are medium dense with an average dry density of approximately 95 pcf. The natural moisture



D. Mark Goodwin & Associates, P.A.
Consulting Engineers

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e-mail: dmg@swcp.com

PROJECT APPLEBEE'S ON 4TH ST
SUBJECT RETENTION POND
BY _____ DATE 3/6/01
CHECKED _____ DATE _____
SHEET _____ OF _____

RETENTION POND

PER ATYMO, THE 100 YR, 6 HR STORM IS $0.184 \text{ AC-FT} = V_{360} = 8015 \text{ CF}$
 $\therefore 2 \times 0.184 \text{ AC-FT} = 0.368 \text{ AC-FT} = 16,030 \text{ CF}$

PER P 22-14

$$V_{10} = V_{360} + A_D (P_{1440} - P_{360}) \frac{\text{FT}}{12 \text{ IN}} \\ = 8015 \text{ CF} + 44,791 (2.60 - 2.20) \frac{\text{FT}}{12 \text{ IN}} = 9508 \text{ CF} < 16,030 \text{ CF}$$

PER ATYMO, THE 100 YR, 24 HR STORM IS $0.212 \text{ AC-FT} = 9235 \text{ CF}$

THE LARGEST OF THESE 3 IS $16,030 \text{ CF}$.
THE RETENTION POND IS SIZED FOR $18,588 \text{ CF}$.
THE RETENTION POND HAS SUFFICIENT CAPACITY.