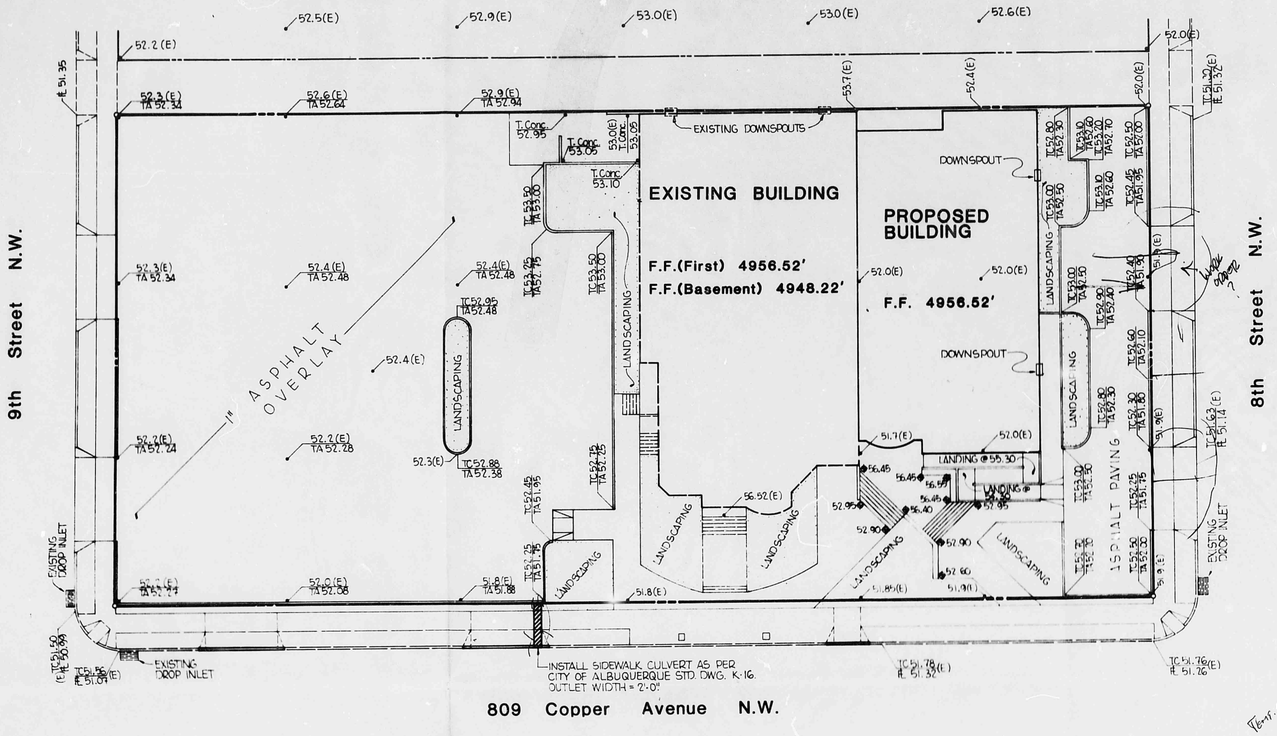
HYDROLOGY

K14/D34
1 PLAN

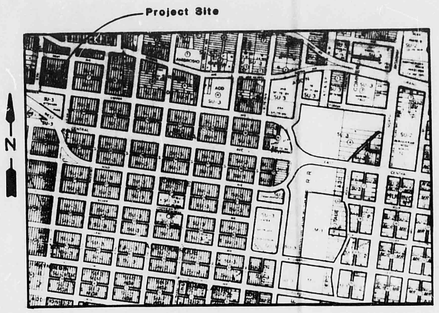
X14/D34

1 PLAN

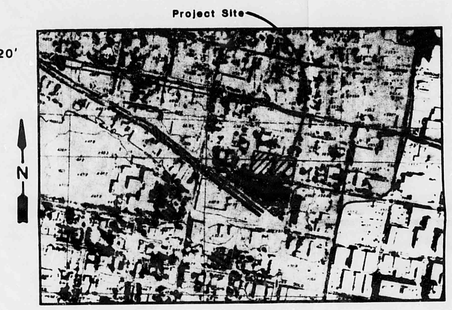
L.O. 3063 DRC 1-21-87



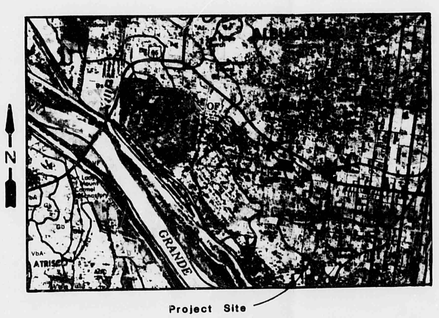

Scale: 1"=20'




Vicinity Map K-14




AMDS Panel 28




Bernalillo County Soils Map Sheet 30

**CONSTRUCTION NOTES:**

1. Two (2) working days prior to any excavation, Contractor shall contact line locating service, 765-1234, for location of existing utilities.
2. Prior to construction, the Contractor shall excavate & verify the horizontal & vertical location of all potential obstructions. Should a conflict exist, the Contactor shall notify the Engineer so that the conflict can be resolved with a minimum amount of delay.
3. All work on this project shall be performed in accordance with applicable federal, state, and local laws, rules and regulations concerning construction safety and health.
4. All construction within public right-of-way shall be performed in accordance with applicable City of Albuquerque standards and procedures.

**DRAINAGE COMPUTATIONS**

Q = CiA  Assume 100% Impervious
C = 0.90 - Roofs
C = 0.95 - Streets, Drives, Walks

RUNOFF TO 8TH STREET

Existing Conditions
Q100 = 0.90(2.25)(7357/43560) + 0.95(2.25)(13842/43560) = 1.021 cfs
Q10 = 1.021 (0.657) = 0.671 cfs

Proposed Conditions
Q100 = 0.90(2.25)(12402/43560) + 0.95 (2.25)(8797)/43560) = 1.008 cfs
Q10 = 1.008(0.657) = 0.662 cfs

RUNOFF TO 9TH STREET

Existing Conditions
Q100 = 0.95(2.25)(21403/43560) = 1.050 cfs
Q10 = 1.050(0.657) = 0.690 cfs

Proposed Conditions
NO CHANGE

RUNOFF FOR TOTAL SITE

Existing Conditions
Q100 = 1.021 + 1.050 = 2.071 cfs
Q10 = 0.671 + 0.690 = 1.361 cfs

Proposed Conditions
Q100 = 1.008 + 1.050 = 2.058 cfs
Q10 = 0.662 + 0.690 = 1.352 cfs

**OFF-SITE FLOWS**

The AMDS indicates that existing streets and storm drainage facilities are adequate to carry flows in a 100-year event.

**DRAINAGE PLAN**

The proposed improvements, as shown on the Vicinity Map, are located on the north side of Copper Avenue NW between 8th and 9th Streets NW. The site covers a half City block.

The computations shown hereon analyze both the existing and proposed conditions for the 100-year and 10-year rainfall event. The rational method has been used for this analysis in accordance with the City of Albuquerque Development Process Manual, Volume II. As discussed between Mr. Fred J. Aguirre, City Hydrology Section, and Mr. David Dekker, Project Architect, in a meeting held on June 4, 1986, it is our intention to discharge all run off from the site freely. As shown in the calculations, the change in peak flow from existing to proposed conditions in the 100-year and 10-year events results in a decrease of 0.013 cfs and 0.009 cfs respectively. These reductions are due to a proposed increase in roof area (C = 0.90) and a proposed decrease in paved area (C = 0.95).

**LEGEND**

| | |
|---|---|
| 52.9(E) | EXISTING SPOT ELEVATION |
| 56.45 | PROPOSED SPOT ELEVATION |
| TC | TOP OF CURB |
| TA | TOP OF ASPHALT |
| TSW | TOP OF SIDEWALK |
| FL | FLOWLINE |
| F.F. | FINISHED FLOOR |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**LEGAL DESCRIPTION**

Lots 19 through 24, Block 43 Original Townsite of Albuquerque, New Mexico

**BENCHMARK**

A.C.S. Brass Cap "1-K14" located at the SW corner of 6th Street NW and Copper Avenue NW.
Elevation = 4952.291'.

**TEMPORARY BENCHMARK**

Top back of curb at the West NW curb return at the intersection of Copper Avenue NW and 8th Street NW.
Elevation = 4951.76'.

**EROSION CONTROL MEASURES:**

1. The Contractor shall ensure that no soil erodes from the site onto private property or City ROW. This can be achieved by constructing temporary berms at the property lines and wetting the soil to keep it from blowing.
2. The Contractor shall promptly clean up any material excavated within the public right-of-way so that the excavated material is not susceptible to being washed down the street.
3. The Contractor shall secure "Topsoil Disturbance Permit" prior to beginning construction.


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revisions

engineer:

architect:

STATE OF NEW MEXICO J. DAVID DEKKER No. 1453 REGISTERED ARCHITECT

RECEIVED JUL 01 1986 HYDROLOGY SECTION

project no.

date:

**GRADING AND DRAINAGE PLAN**

**SHEET C-1 OF**