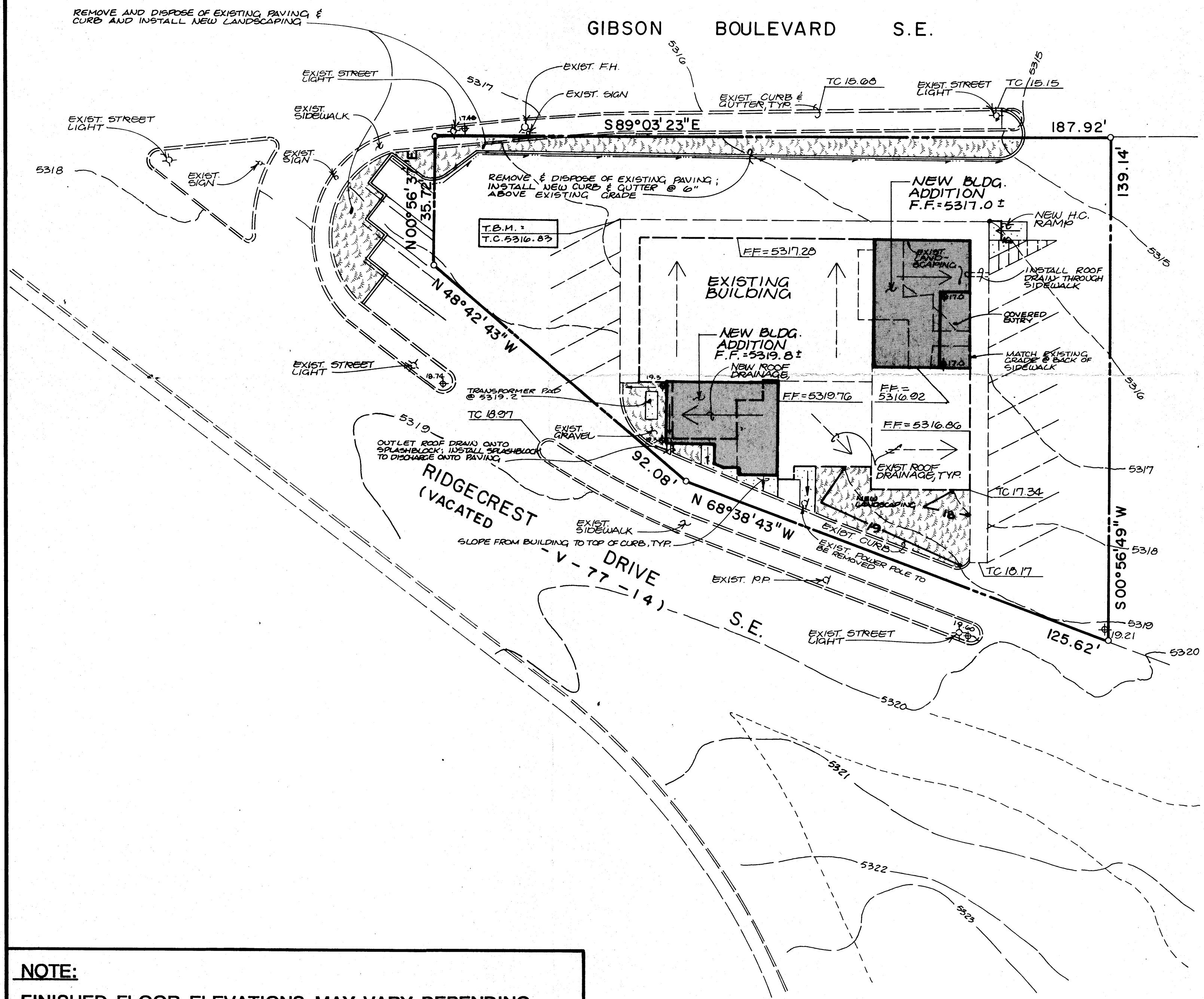


VICINITY MAP
SCALE: 1" = 800'

M-18



NOTE:
FINISHED FLOOR ELEVATIONS MAY VARY DEPENDING UPON DEMOLITION AND REMODEL ACTIVITIES. THE INTENT OF THIS PLAN IS TO MATCH EXISTING AND / OR NEW FINISHED FLOOR ELEVATIONS.

PROJECT BENCHMARK

THE STATION IS A 3/4" ALUMINUM TABLET SET IN CONCRETE PROJECTING 0.5' ABOVE THE ASPHALT PAVEMENT. STATION IS STAMPED 'ACS 85 1034'. THE STATION IS LOCATED 4.2 MILES SOUTHEAST FROM DOWNTOWN ALBUQUERQUE, IN THE INTERSECTION OF GIBSON BLVD & SAN MATEO BLVD.
ELEVATION: 5317.32 ft. (M.S.L.D.)

T.B.M.

TOP OF CURB ELEVATION AT THE NORTHWEST CORNER OF THE EXISTING BUILDING.
ELEVATION: 5316.83 FEET (M.S.L.D.)

LEGAL DESCRIPTION

LOT 1, SWIFT ADDITION,
ALBUQUERQUE, NEW MEXICO

LEGEND

- EXISTING SPOT ELEVATION
- EXISTING CONTOUR
- EXISTING CONCRETE
- NEW LANDSCAPING
- NEW BUILDING ADDITION
- PROPOSED SPOT ELEVATION
- PROPOSED CONTOUR

DRAINAGE PLAN

The following items concerning the Lovelace Cosmetic Surgery Drainage Plan are contained hereon:

1. Vicinity Map
2. Grading Plan
3. Calculations

As shown by the Vicinity Map, the site is located at the southeast corner of the intersection of Gibson Boulevard S.E. and vacated Ridgecrest Drive S.E. Ridgecrest Drive S.E. was vacated in 1977 by Vacation Ordinance V-77-14. The vacated roadway is presently owned and used by Lovelace Medical Center.

As shown by Panel 36 of the National Flood Insurance Program Flood Boundary and Floodway Maps for the City of Albuquerque, New Mexico, this site does not lie within a designated flood hazard zone. In addition, it does not appear that this site contributes runoff to an existing flood hazard area. Many Capital Improvement Projects (CIP) have been implemented in this area to alleviate the localized flooding within the surrounding public streets. Furthermore, this is a modification to an existing site within an infill area. Due to the fact that the overall imperviousness of the site is not altered by the proposed improvements, coupled with the information presented above, the free discharge of runoff from this site is appropriate.

The Grading Plan shows 1) existing and proposed grades indicated by spot elevations at 1'0" intervals, 2) the limit and character of the existing improvements, 3) the limit and character of the proposed improvements and 4) continuity between the existing and proposed grades. As shown by this plan, the proposed improvements consist of the demolition of portions of the site, the construction of two building additions to the existing structure, and the creation of new landscaped areas. At present, the site drains from southwest to northeast onto Gibson Boulevard S.E. From that point, the runoff flows east in Gibson Boulevard S.E. The runoff will flow within the existing street system and eventually enter newly constructed public storm drain improvements downstream from the site. The proposed improvements will not alter the existing drainage pattern of the site. Much of the runoff flows within and through the site within the existing paved parking area. Minor modifications are proposed to the existing paving which will not alter this existing drainage pattern. Runoff will continue to flow through the site and discharge to Gibson Boulevard S.E. through an existing driveway entrance. Offsite flows do not enter the site from the north due to the presence of the fully improved Gibson Boulevard S.E. This roadway is topographically lower than the site in addition to appearing to contain its runoff within the street section. The site to the east is topographically lower, therefore, does not contribute any offsite flows. Ridgecrest Drive S.E. lies to the south and west of the site. As stated above, Ridgecrest Drive S.E. has been previously vacated and is presently being used by the Lovelace Medical Center. For the most part, it appears that runoff carried within this vacated roadway stays within the limits defined by the existing curb and gutter. Some runoff may overflow the roadway limits and cross the site within the already paved surfaces. This runoff, if it enters the site, will safely pass through the site and be discharged to Gibson Boulevard S.E. It is difficult to quantify this potential offsite flow; therefore, no calculations have been provided. Offsite flows from Ridgecrest Drive S.E. are expected to be negligible.

The Calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The Rational Method has been used to calculate the peak discharge of runoff whereas the SCS Method has been used to determine the volume of runoff generated. Both Methods have been used in accordance with the City of Albuquerque Development Process Manual Volume II, coupled with the Mayor's Emergency Rule dated January 14, 1986. As shown by these calculations, the proposed improvements will not increase the runoff generated by this site.

CALCULATIONS

Ground Cover Information

From SCS Bernalillo County Soil Survey, Plate 31: WaB - Wink Fine Sandy Loam
Hydrologic Soil Group: B
Pervious CN = 61 (DPM Plate 22.2 C-2)
Open Space: good condition)

Time of Concentration/Time to Peak

$T_c = 0.0078 L^{0.77} / S^{0.385}$ (Kirpich Equation)

$T_p = T_c = 10 \text{ min.}$

Point Rainfall

$P_6 = 2.33 \text{ in. (DPM Plate 22.2 D-1)}$

Rational Method

Discharge: $Q = CIA$

where C varies

$i = P (6.84) T_c^{-0.51} = 4.92 \text{ in/hr}$
 $P_6 = 2.33 \text{ in (DPM Plate 22.2D-1)}$
 $T_c = 10 \text{ min (minimum)}$
 $A = \text{area, acres}$

SCS Method

Volume: $V = 3630 (DRO) A$

Where DRO = Direct runoff in inches
 $A = \text{area, acres}$

Existing Condition

$A_{\text{total}} = 18,420 \text{ sf} = 0.42 \text{ Ac}$
Roof area = 4,360 sf (0.24)
Paved area = 12,210 sf (0.66)
Landscaped area = 1,850 sf (0.10)
 $C = 0.87$ (Weighted average per Emergency Rule, 1/14/86)
 $Q_{100} = CIA = 0.87(4.92)(0.42) = 1.8 \text{ cfs}$
% impervious = 90 %
Composite CN = 94 (DPM Plate 22.2 C-2)
DRO = 1.7 in (DPM Plate 22.2 C-4)
 $V_{100} = 3630 (DRO)A = 2,590 \text{ cf}$

Developed Condition

$A_{\text{total}} = 18,420 \text{ sf} = 0.42 \text{ Ac}$
Roof area = 5,710 sf (0.31)
Paved area = 10,900 sf (0.59)
Landscaped area = 1,810 sf (0.10)
 $C = 0.86$ (Weighted average per Emergency Rule, 1/14/86)
 $Q_{100} = CIA = 0.86(4.92)(0.42) = 1.8 \text{ cfs}$
% impervious = 90 %
Composite CN = 94 (DPM Plate 22.2 C-2)
DRO = 1.7 in (DPM Plate 22.2 C-4)
 $V_{100} = 3630 (DRO)A = 2,590 \text{ cf}$

Comparison

$Q_{100} = 1.8 - 1.8 = 0 \text{ cfs (no change)}$
 $V_{100} = 2,590 - 2,590 = 0 \text{ cf (no change)}$

CONSTRUCTION NOTES:

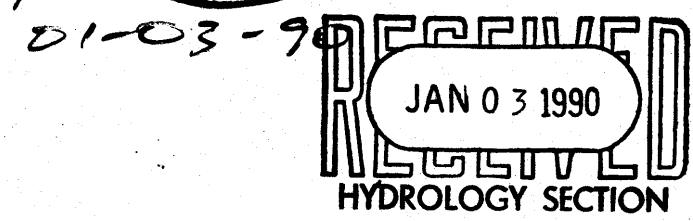
1. Two (2) working days prior to any excavation, contractor must contact Line Locating Service 765-1234, for location of existing utilities.
2. Prior to construction, the contractor shall excavate and verify the horizontal and vertical location of all potential obstructions. Should a conflict exist, the contractor shall notify the engineer in writing 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.
5. If any utility lines, pipelines, or underground utility lines are shown on these drawings, they are shown in an approximate manner only, and such lines may exist where none are shown. If any such existing lines are shown, the location is based upon information provided by the owner of said utility, and the information may be incomplete, or may be obsolete by the time construction commences. The engineer has conducted only preliminary investigation of the location, depth, size, or type of existing utility lines, pipelines, or underground utility lines. This investigation is not conclusive, and may not be complete, therefore, makes no representation pertaining thereto, and assumes no responsibility or liability therefor. The contractor shall inform itself of the location of any utility line, pipeline, or underground utility line in or near the area of the work in advance of and during excavation work. The contractor is fully responsible for any and all damage caused by its failure to locate, identify and preserve any and all existing utilities, pipelines, and underground utility lines. In planning and conducting excavation, the contractor shall comply with state statutes, municipal and local ordinances, rules and regulations, if any, pertaining to the location of these lines and facilities.
6. The design of planters and landscaped areas is not part of this plan. All planters and landscaped areas adjacent to the building(s) shall be provided with positive drainage to avoid any ponding adjacent to the structure. For construction details, refer to landscaping plan.

Erosion Control Measures

1. The contractor shall ensure that no soil erodes from the site into public right-of-way or onto private property. 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.



HYDROLOGY SURVEY
Survey Date: _____
Hydrology Book No./Page No. _____
Surveyed by: _____
APPROVED 4-18-90
ADDITIONS ONLY



JEFF MORTENSEN & ASSOCIATES, INC.
811 DALLAS, N.E. ALBUQUERQUE, NM 87110
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GRADING & DRAINAGE PLAN
LOVELACE COSMETIC SURGERY

DESIGNED BY	NO.	DATE	BY	REVISIONS	JOB NO.
J.G.M.					891125
DRAWN BY					DATE
R.A.R.					12/89
APPROVED BY					SHEET
J.G.M.					OF