

VICINITY MAP
SCALE: 1" = 750'

LEGAL DESCRIPTION

A PORTION OF PARCEL B-5-B-1, UNIT 5, ACADEMY ACRES SUBDIVISION, ALBUQUERQUE, NEW MEXICO

PROJECT BENCHMARK

B.M. NO. 9-E17
A SQUARE "X" CHISELED ON TOP OF CONCRETE CURB AT THE S.E. CURB RETURN LOCATED AT THE INTERSECTION OF OSUNA ROAD AND WEST FRONTAGE ROAD OF INTERSTATE 25. ELEVATION = 5169.937' (M.S.L.D.)

T.B.M.

ON N.E. BONNET BOLT OF FIRE HYDRANT AS SHOWN ON DRAWING.
ELEVATION = 5194.25' (M.S.L.D.)

LEGEND

TA	TOP OF ASPHALT
NG	TOP OF ASPHALT CURB
TC	NATURAL GROUND
TCO	TOP OF CURB
FL	TOP OF CONCRETE
FW	FLOW LINE
LP	TOP OF WALL
LP	LIGHT POLE
+	EXISTING SPOT ELEVATION
+	EXISTING CONTOUR
+	DECIDUOUS TREE
+	SHRUB
+	PROPOSED SPOT ELEVATION
+	FLOW LINE
+	PROPOSED CONTOUR
+	SITE/BASIN LIMIT
+	PROPOSED CONCRETE
+	PROPOSED ASPHALT PAVING

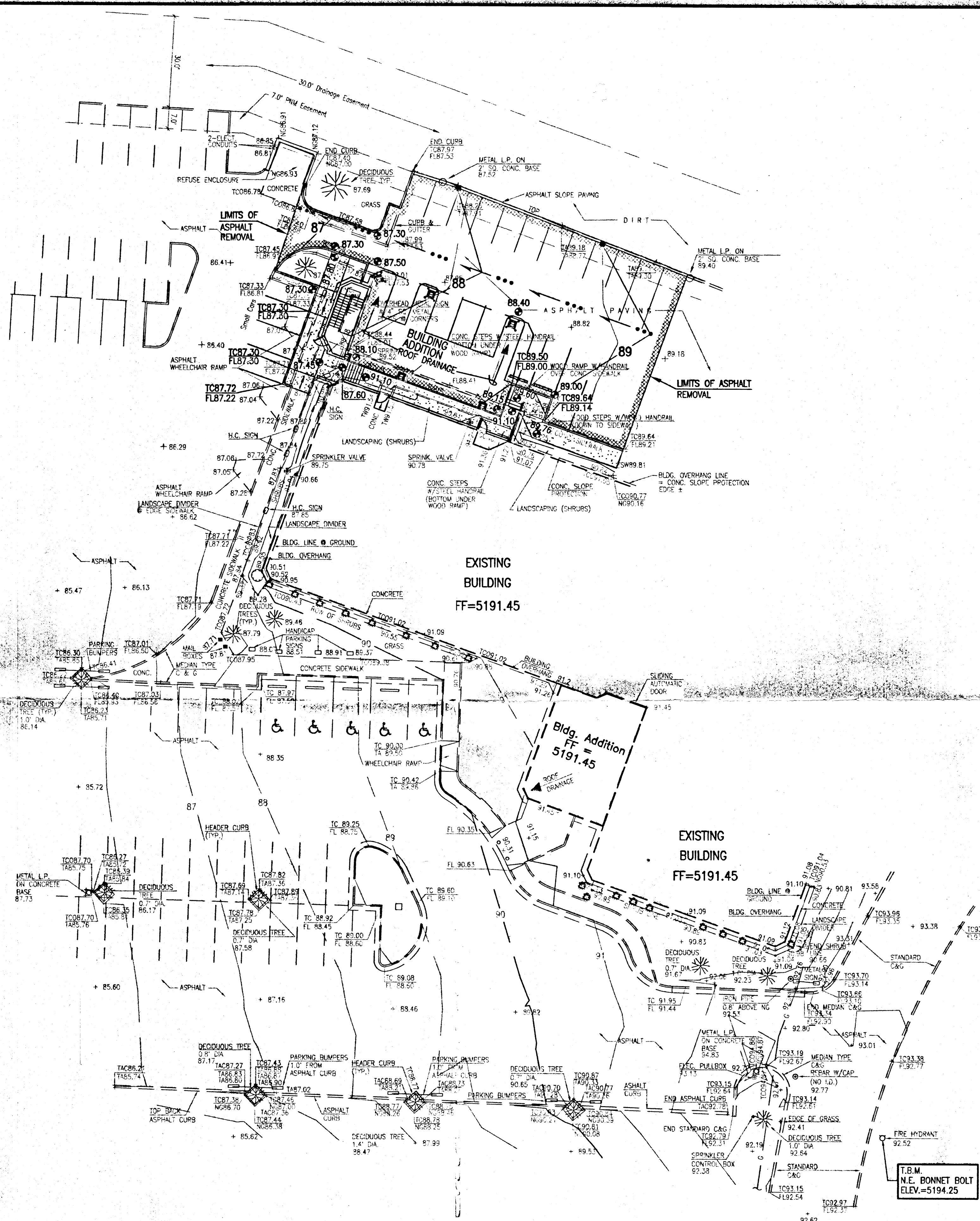
E-18

Construction Notes:

- Two (2) working days prior to any excavation, contractor must contact New Mexico One Call System 260-1990, for location of existing utilities.
- 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.
- 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.
- All construction within public right-of-way shall be performed in accordance with applicable City of Albuquerque Standards and Procedures.
- 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.
- 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:

- The contractor shall ensure that no soil erodes from the site into public right-of-way or onto private property.
- 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.
- The contractor shall secure "Topsoil Disturbance Permit" prior to beginning construction.



DRAINAGE PLAN

The following items concerning the Presbyterian Northside Medical Building (NMB) Building Addition Drainage Plan are contained herein:

- Vicinity Map
- Grading Plan
- Calculations
- Floodplain Map

As shown by the Vicinity Map, the site is located on Pan American Freeway N.E., between Harper Drive N.E. and Forest Hills Drive N.E. At present, the site is developed making this a modification to an existing site within an infill area.

As shown by Panel 17 of 50 of the National Flood Insurance Program Flood Insurance Rate Map published by F.E.M.A. for the City of Albuquerque, New Mexico dated October 14, 1983, this site does not lie within a designated flood hazard zone. The site does, however, contribute to a flood hazard zone which is designated in the northwest corner of the site. As demonstrated by previous submittal for this site (E18/D29) dated July 07, 1995 and approved July 17, 1995, interim detention ponding is no longer required. Downstream conditions have been improved as more clearly demonstrated by that submittal. In view of this, the continued free discharge from this site is appropriate.

The Grading Plan shows: 1) existing and proposed grades indicated by spot elevations and contours 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 existing and proposed grades. As shown by this plan, the proposed improvements consist of the construction of a two-story addition. The first level will be covered parking and will occupy an area which is currently paved. For the most part, this project replaces an impervious paved surface with impervious roof area. Existing pavement removal and replacement will be required in order to facilitate the construction and to promote positive drainage away from the addition.

The Calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The Procedure for 40-acre and Smaller Basins, as set forth in the Revision of Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria, dated January, 1993, has been used to quantify the peak rate of discharge and volume of runoff generated. As shown by these calculations, a negligible increase in runoff is anticipated in conjunction with this project.

CALCULATIONS

Site Characteristics

- Precipitation Zone = 3
- $P_{100} = P_{60} = 2.60$ in.
- Total Area (A_T) = 0.83 ac

4. Existing Land Treatment

Treatment	Area (sf/ac)	%
B	3,960/0.09	19.9
D	32,320/0.74	89.1

5. Developed Land Treatment

Treatment	Area (sf/ac)	%
B	3,635/0.08	9.6
D	32,645/0.75	90.4

Existing Condition

1. Volume

$$E_w = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$$

$$E_w = [(0.92)(0.09) + (2.36)(0.74)] / (0.83) = 2.20 \text{ in.}$$

$$V_{100} = (E_w / 12) A_T$$

$$V_{100} = ((2.20) / 12) (0.83) = 0.1524 \text{ ac.ft.} = 6,640 \text{ cf}$$

2. Peak Discharge

$$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$$

$$Q_p = Q_{100} = (2.60)(0.09) + (5.02)(0.74) = 3.9 \text{ cfs}$$

Developed Condition

1. Volume

$$E_w = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$$

$$E_w = [(0.92)(0.08) + (2.36)(0.75)] / (0.83) = 2.22 \text{ in.}$$

$$V_{100} = (E_w / 12) A_T$$

$$V_{100} = ((2.22) / 12) (0.83) = 0.1536 \text{ ac.ft.} = 6,690 \text{ cf}$$

2. Peak Discharge

$$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$$

$$Q_p = Q_{100} = (2.60)(0.08) + (5.02)(0.75) = 4.0 \text{ cfs}$$

Comparison

- $\Delta V_{100} = 6,690 - 6,640 = 50 \text{ cf (increase)}$
- $\Delta Q_{100} = 4.0 - 3.9 = 0.1 \text{ cfs (increase)}$

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HYDROLOGY LIMITED

JEFFREY G. MORTENSEN
NEW MEXICO
8547
04-24-96



JEFF MORTENSEN & ASSOCIATES, INC.
6810-B MIDWAY PARK BLVD. N.E.
ALBUQUERQUE, N.M. 87109
ENGINEERS & SURVEYORS C200 3445-4250

GRADING AND DRAINAGE PLAN PRESBYTERIAN NMB ADDITION

DESIGNED BY J.G.M.
DRAWN BY S.G.H.
APPROVED BY J.G.M.

NO.	DATE	BY	REVISIONS	JOB NO.
				950186
				DATE 04-1996
				SHEET C3