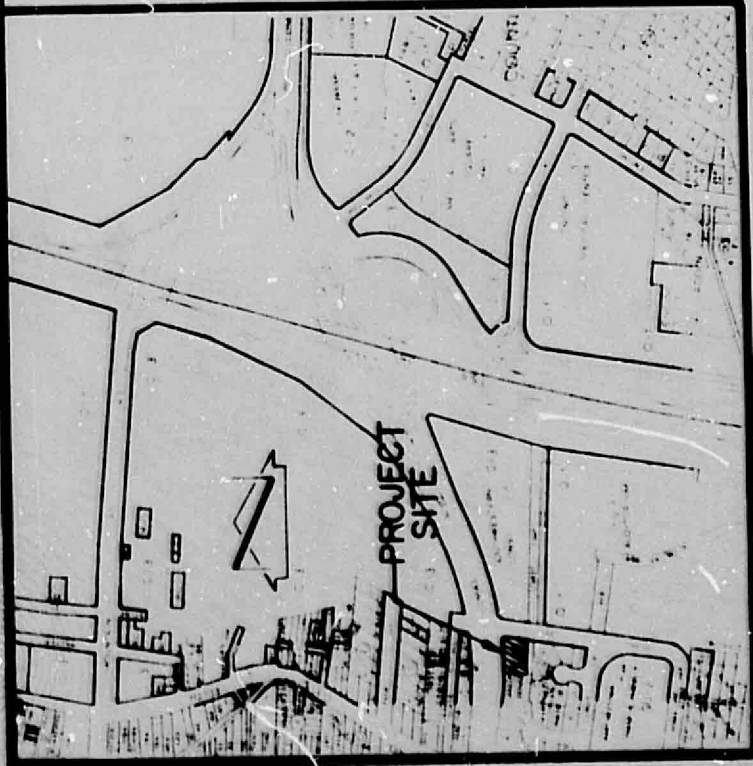




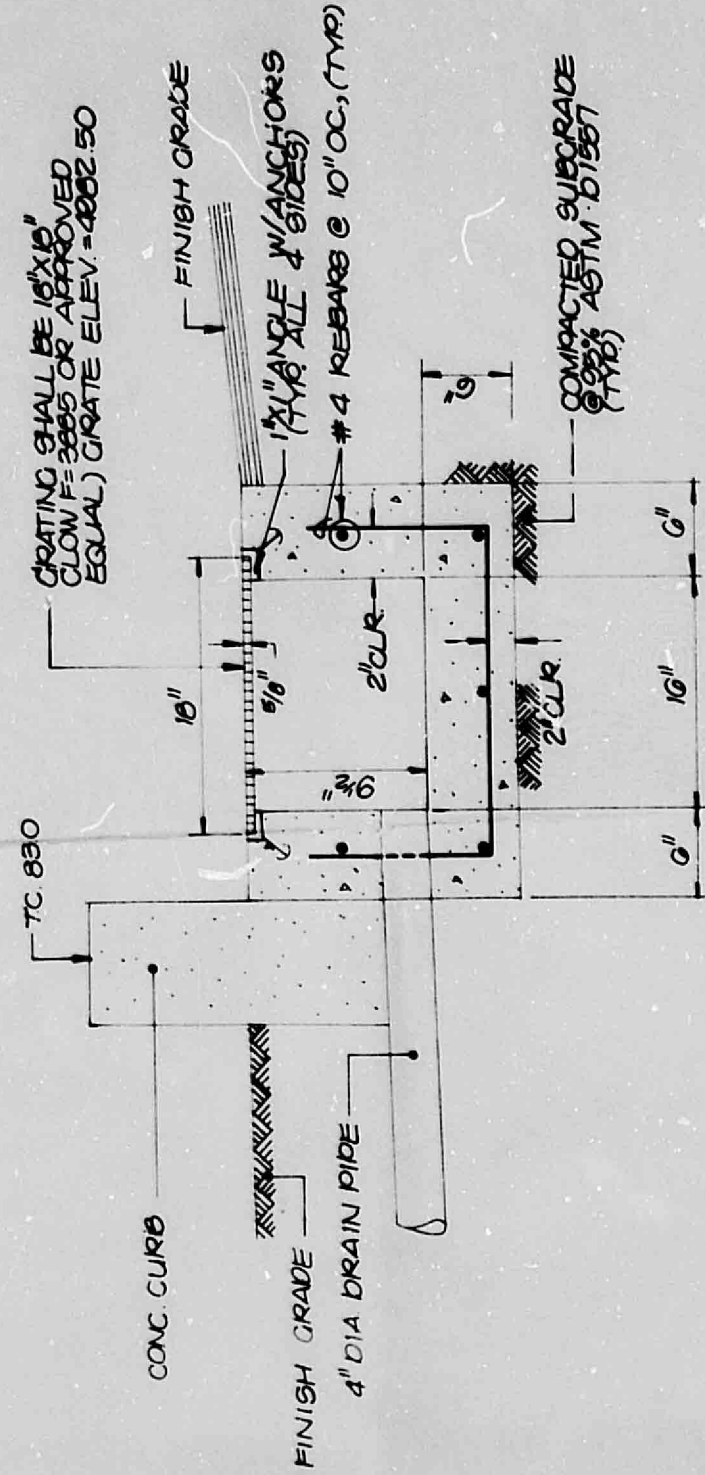
J-15

VICINITY MAP

SCALE 1" = 800'

LEGEND

- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- EXISTING CONTOUR
- PROPOSED CONTOUR
- SWATH
- EXISTING TOP OF CURB
- EXISTING F.W. LINE
- CONCRETE
- BASEIN BOUNDARY

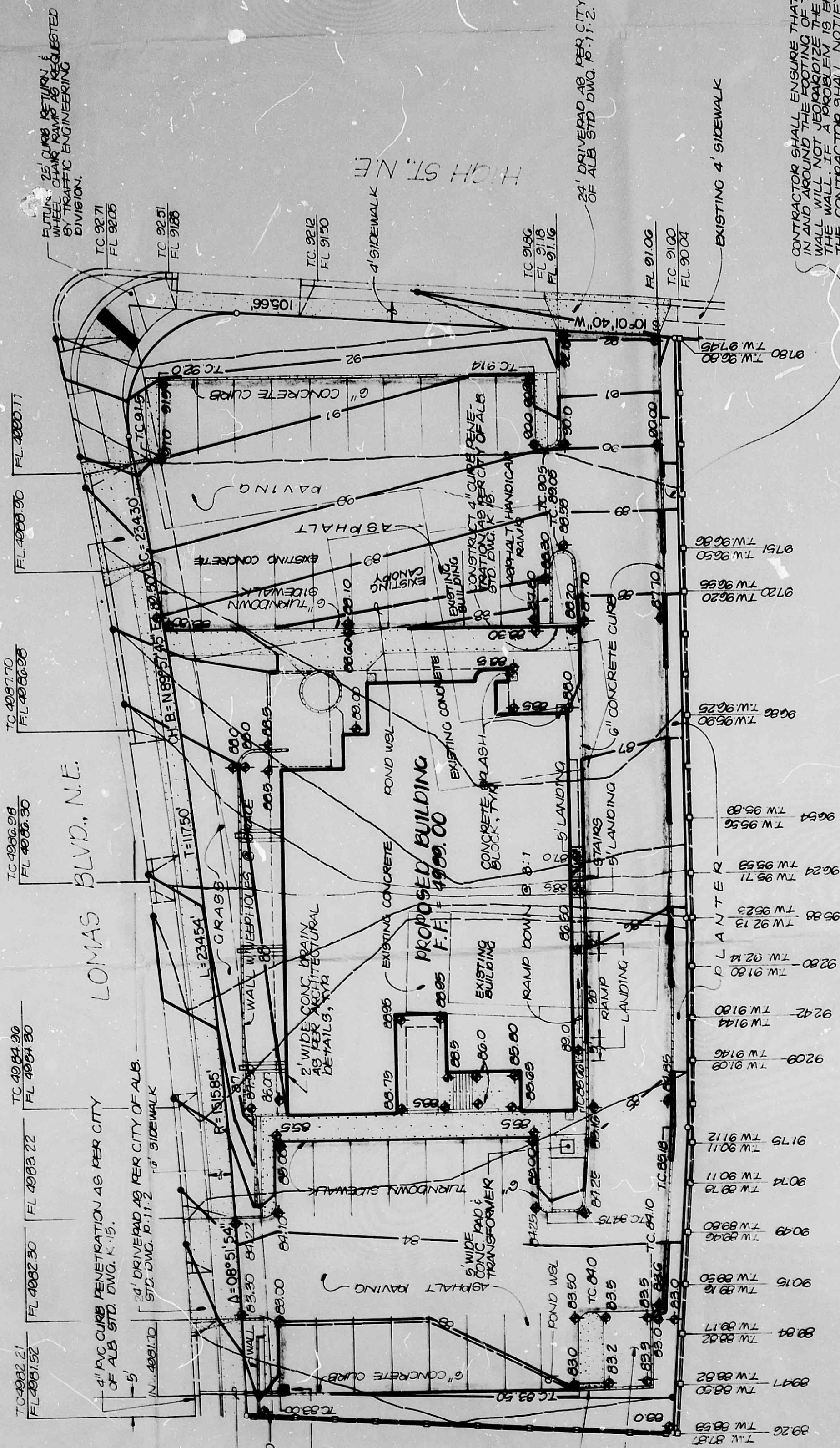


TYPICAL INLET SECTION

SCALE 1" = 12"

CONSTRUCTION NOTES:

- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER 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.
- LANDINGS SHALL HAVE A 2% CROSS-SLOPE AWAY FROM THE BUILDING.



CONTRACTOR SHALL ENSURE THAT EXCAVATION IN AND AROUND THE BUILDING IS DONE IN A MANNER THAT DOES NOT COMPROMISE THE STABILITY OF THE WALL. IF A PROBLEM IS ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER. SO THAT ANY CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.

The following items concern hereon:

- 1
- 2
- 3

The proposed improvements, southwest corner of the intersection of the site is presently developed or currently under development. The demolition of the existing building with adjacent single building with adjacent

Review of the Albuquerque flood is a concern. The routing through a positive discharge of runoff from the overflow runoff will leave

The Grading Plan shows elevations and contours at proposed grades. The site, and 4) the limit order to accommodate the with the exception of the be removed. At present, Lomas Boulevard N.E. Once to flow to the west. development.

The calculations which are conditions for the 100-year Development Process Manual that a minor decrease in of the site.

- From SCS Bernadillo County Cut and Fill Land and Hydrologic Soil Group A
- Existing Condition
A total = 30,720 sf = 0.71 A
A imp = 17,300 sf
Z = impervious = 17,300/30,720
'C' = 0.46 (DPM Plate 22.20)
- Developed Condition
A total = 30,720 sf = 0.71 A
A imp = 24,810 sf
Z = impervious = 24,810/30,720
'C' factor = 0.65 (DPM Plate 22.20)

Rational Method

- Discharge: $Q = CIA$
where C varies
 $I = P (6.84) T^{-0.51}$
 $P = 2.2$ in (DPM Plate)
 $T = 10$ min (minimum)
 $A =$ area = 0.71 Ac
Volume: $V = CP A (1/12)$
where C varies
 $P = 2.2$ in (DPM Plate)
 $A = 30,720$ sf
Existing Condition
 $Q_{100} = CIA = 0.46 (4.65) (0.71) = 1.22$
 $V_{100} = C(P/12)A = 0.46 (2.2) (0.71) = 0.71$

PROJECT BENEFICIAL
An "x" chiseled intersection of
Elevation: 499
LEGAL ADDRESS:
Woodward Center
April 5, 1983,
STREET ADDRESS:
522 Lomas Blvd

JOB NO. 2-1392		DATE 4/83	
DESIGNED BY JOM	DRAWN BY GGG/JMC	APPROVED JTM	
REVISIONS			
NO.	DATE	BY	

811 DALLAS N.E. ALBUQUERQUE - NEW MEXICO - 87110
ENGINEERS



GRADING & DRAINAGE
NEUROSURGIC

Plan Shot In Two Sections

DRAINAGE PLAN

The following items concerning the Woodward West Drainage Plan are contained hereon:

1. Vicinity Map
2. Grading Plan
3. Calculations

The proposed improvements, as shown by the Vicinity Map, are located at the southwest corner of the intersection of High Street N.E. and Lomas Boulevard N.E. The site is presently developed. Adjacent sites are presently developed or currently undergoing development. The proposed plan involves the demolition of the existing improvements on-site and the construction of a single building with adjacent paving and landscaping.

Review of the Albuquerque Master Drainage Study reveals that downstream flooding is a concern. Because of this, runoff generated on-site will be routed through a positive discharge pond to Lomas Boulevard N.E. This discharge of runoff from the site will be via a 4-inch PVC curb penetration. Overflow runoff will leave the site via the western driveway.

The Grading Plan shows 1) existing and proposed grades indicated by spot elevations and contours at 1'-0" intervals, 2) continuity between existing and proposed grades, 3) the limit and character of existing improvements on the site, and 4) the limit and character of the proposed improvements. In order to accommodate the proposed improvements, the existing improvements, with the exception of the wall along the south and west property lines, will be removed. At present, runoff flows from east to west and discharges to Lomas Boulevard N.E. Once the runoff enters Lomas Boulevard, it continues to flow to the west. This pattern of runoff will not be altered by development.

The calculations which appear below analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The Rational Method has been used for this analysis in accordance with the City of Albuquerque Development Process Manual, Volume II. The calculations also demonstrate that a minor decrease in peak runoff is anticipated due to the development of the site.

CALCULATIONS:

1. From SGS Bernalillo County Soil Survey, Plate 31:
Cu Cut and Fill Land and BMD Blueprint - Kolan Association
Hydrologic Soil Group A

2. Existing Condition

$$\begin{aligned} A_{\text{total}} &= 30,720 \text{ sf} = 0.71 \text{ Ac} \pm \\ A_{\text{imp}} &= 17,300 \text{ sf} \\ Z &= \text{Impervious} = 17,300/30,720 = 56\% \\ 'C' &= 0.46 \text{ (OPM Plate 22.2C-1)} \end{aligned}$$

3. Developed Condition

$$\begin{aligned} A_{\text{total}} &= 30,720 \text{ sf} = 0.71 \text{ Ac} \pm \\ A_{\text{imp}} &= 24,810 \text{ sf} \\ Z &= \text{Impervious} = 24,810/30,720 = 81\% \\ 'C' &= 0.65 \text{ (OPM Plate 22.2C-1)} \end{aligned}$$

Rational Method

1. Discharge: $Q = CIA$
where C varies

$$\begin{aligned} i &= P_6 (6.84) T^{-0.51} = 4.65 \text{ in/hr} \\ P_6 &= 2.2 \text{ in (OPM Plate 22.2D-1)} \\ T_c &= 10 \text{ min (minimum)} \\ A &= \text{area} = 0.71 \text{ Ac} \end{aligned}$$

2. Volume: $V = CP A(1/12)$
where C varies

$$\begin{aligned} P_6 &= 2.2 \text{ in (OPM Plate 22.2D-1)} \\ A &= 30,720 \text{ sf} \end{aligned}$$

Existing Condition

$$\begin{aligned} Q_{100} &= CIA = 0.46 (4.65) (0.71) = 1.5 \text{ cfs} \\ V_{100} &= C(P_6/12)A = 0.46 (2.2/12) 30,720 = 2591 \text{ cf} \end{aligned}$$

PROJECT BENCHMARK = TBM:

An "u" chiseled on top of concrete curb at ESE curb return at the intersection of Lomas Boulevard N.E. and High Street N.E.
Elevation: 4996.00 feet (MSLD)

LEGAL ADDRESS:

Woodward Center West as shown on the plat of the same name filed April 5, 1983, Book C21, Page 27.

STREET ADDRESS:

522 Lomas Boulevard N.E.

IF AN EXCAVATION
OR OTHER
ENCOUNTERED
BY THE ENGINEER
BE DELAY.

Job title **J15/D16**

job no _____ date _____

sheet title _____ by _____

REGISTERED PROFESSIONAL ENGINEER
THOMAS J. HALL
No. 3732

GRADING & DRAINAGE PLAN
NEUROSURGICAL OFFICES

de la Torre • ROTHBART, PA
architects
2210 Lomas Boulevard N.E. Suite 14
Albuquerque, NM 87106-5888

sheet _____ of _____