City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

October 4, 1990

R.G. Lee
Lee Engineering
8225 Connecticut, NE
Albuquerque, New Mexico 87110

RE: DRAINAGE PLAN FOR MELLOY NISSAN (F-18/D52)
RECEIVED SEPTEMBER 17, 1990 STAMP DATED SEPTEMBER 17, 1990

Dear Mr. Lee:

Based on the information provided on your submittal of September 17, 1990, listed are some items which must be addressed prior to approval.

1. Please check your direct runoff value again.
2. Your plan drawing indicates that you are doing work outside the property limits.
3. There is a conflict between your contour lines and what you indicate as easement line on your legend.
4. You may want to check with Traffic Engineering they may require a drive pad within the property limits.
5. If they do not, is there an easement that allows Tract A-2-C to exit through the adjacent property?
6. Some of the spot elevation numbers are not clear enough to read.

If I can be of further assistance, please feel free to call me at 768-2650.

Cordially,

for Bernie J. Montoya
Fred J. Aguirre, P.E.
Hydrologist

BJM:FJA/bsj
(WP+2204)

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Melloy Nissan ZONE ATLAS/DRNG. FILE #: F-18 / D52

LEGAL DESCRIPTION: Tract A-2-C, Spanish Land Company Subdivision

CITY ADDRESS: _____

ENGINEERING FIRM: LEE ENGINEERING CONTACT: R.G. LEE

ADDRESS: 8225 Connecticut NE PHONE: 299-2471

OWNER: Melloy Nissan CONTACT: Robert Melloy

ADDRESS: 7107 Comas N.E. PHONE: 265-8721

ARCHITECT: Miller & Associates CONTACT: Jim Miller

ADDRESS: 2823 Richmond Dr NE PHONE: 884-1255

SURVEYOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

CONTRACTOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING:

___ YES

X NO

___ COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. _____

EPC NO. _____

PROJ. NO. _____

TYPE OF SUBMITTAL:

___ DRAINAGE REPORT

X DRAINAGE PLAN

___ CONCEPTUAL GRADING & DRAINAGE PLAN

X GRADING PLAN

___ EROSION CONTROL PLAN

___ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

___ SKETCH PLAT APPROVAL

___ PRELIMINARY PLAT APPROVAL

___ SITE DEVELOPMENT PLAN APPROVAL

___ FINAL PLAT APPROVAL

X BUILDING PERMIT APPROVAL

___ FOUNDATION PERMIT APPROVAL

___ CERTIFICATE OF OCCUPANCY APPROVAL

___ ROUGH GRADING PERMIT APPROVAL

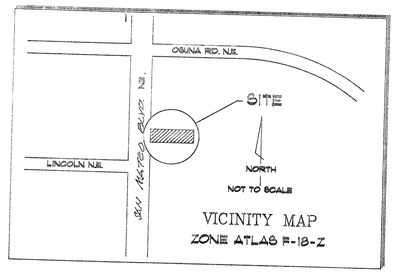
___ GRADING/PAVING PERMIT APPROVAL

___ OTHER _____ (SPECIFY)

RECEIVED
SEP 17 1990
HYDROLOGY DIVISION

DATE SUBMITTED: 9/17/90

BY: Hernan Hrod



VICINITY MAP
ZONE ATLAS F-18-Z

DRAINAGE CALCULATIONS

I. REFERENCES:
- A. CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (DPM) VOL. 2 DESIGN CRITERIA, CHAPTER 22: DRAINAGE,FLOOD CONTROL, AND EROSION CONTROL.
- B. SOIL SURVEY OF BERNALILLO COUNTY AND PARTS OF SANDOVAL AND VALENCIA COUNTIES, NEW MEXICO, UNITED STATES DEPARTMENT OF AGRICULTURAL, SOIL CONSERVATION SERVICE.
- C. FLOODWAY, FLOOD BOUNDARY AND FLOODWAY MAP, CITY OF ALBUQUERQUE, NEW MEXICO, PANEL 17 OF 50.
- D. ZONE ATLAS PAGE F-18-Z

II. GENERAL INFORMATION:
- A. SOIL TYPE (REF. B, PAGE 21) SOIL TYPE IS GILA LOAM (Gb). HYDROLOGIC SOIL GROUP "B".
- B. IMPERVIOUSNESS:

TYPE OF SURFACES	EXISTING SQ.FT	EXISTING ACRES	PROPOSED SQ.FT	PROPOSED ACRES
BUILDING ROOF	2100	0.0482	8464	0.1943
CONCRETE SURFACES	0	0.0000	5507	0.1264
ASPHALT SURFACES	24650	0.5659	48209	1.1067
LANDSCAPING	0	0.0000	5820	0.1336
UNDEVELOPED	41250	0.9470	0	0.0000
SITE TOTAL	68000	1.5611	68000	1.5611

- C. "C" FACTOR

EXISTING IMPERVIOUS SURFACES	FACTOR	AREA	C X A
BUILDING ROOF	0.90	0.0482	0.0434
CONCRETE SURFACES	0.95	0.0000	0.0000
ASPHALT SURFACES	0.95	0.5659	0.5376
LANDSCAPING	0.25	0.0000	0.0000
UNDEVELOPED	0.40	0.9470	0.3788
SITE TOTAL		1.5611	0.9598

EXISTING WEIGHTED "C" FACTOR = 0.61

PROPOSED IMPERVIOUS SURFACES	FACTOR	AREA	C X A
BUILDING ROOF	0.90	0.1943	0.1749
CONCRETE SURFACES	0.95	0.1264	0.1201
ASPHALT SURFACES	0.95	1.1067	1.0514
LANDSCAPING	0.25	0.1336	0.0334
UNDEVELOPED	0.40	0.0000	0.0000
SITE TOTAL		1.5611	1.3798

PROPOSED WEIGHTED "C" FACTOR = 0.88

- D. 100 YEAR RAINFALL, 6 HOUR, P(6); (SEE REF. A, PLATE 22.2 D-1) = 2.30 INCHES (INTERPOLATION VALUE).
- E. TIME OF CONCENTRATION, Tc; Tc = 10 MINUTES (USE 10 MINUNTES (MINIMUM VALUE) FOR CALCULATIONS.
- F. RAINFALL INTENSITY, I; (SEE REF. A, PLATE 22.2 D-2)
  I = P(6) x 6.84 x Tc EXP.(-0.51)
  = 2.30 x 6.84 x 10 EXP.(-0.51)
  = 4.86 INCHES

III. PEAK DISCHARGE: (RATIONAL METHOD)
- A. EXISTING CONDITION
  Q(100) = 0.61 x 4.86 x 1.5610
  = 4.67 CFS(REF A, PLATE 22.2D-1)
  Q(10) = 4.67 x 0.65
  = 3.07 CFS(REF A, PLATE 22.2D-1)
- B. PROPOSED CONDITIONS
  Q(100) = 0.78 x 4.86 x 1.5611
  = 5.96 CFS(REF A, PLATE 22.2D-1)
  Q(10) = 5.96 x 0.65
  = 3.91 CFS(REF A, PLATE 22.2D-1)

IV. VOLUME GENERATED (SCS METHOD)
- A. 100 YEAR RAINFALL, 6 HOUR, P(6); (DPM)
  P(6) = 2.30 INCHES (INTERPOLATION VALUE).
- B. CURVE NUMBER = 88 (REF. A, PLATE 22.2 C-2)
- C. DIRECT RUNOFF (Q) IN INCHES = 1.60
- D. VOLUME (Q X A X 3630)
  V = 1,900 CU. FT.

LEGAL DESCRIPTION

TRACT A-2-C
SPANISH LAND COMPANY SUBDIVION
ALBUQUERUQUE, NEW MEXICO

WITHIN THE RIGHTS-OF-WAY. THERE ARE NO FLOODING CONDITIONS DOWN STREAM.

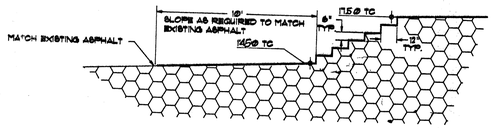
BENCH-MARK INFORMATION

ON-SITE TEMPORARY BENCH-MARK SHOWN HEREON BEING THE NORTH BONNET BOLT OF THE A FIRE HYDRANT LOCATED AT THE SOUTHEAST OF THE PROPERTY BEARS ELEVATION 5214.74(MSL). REFERENCE TO CITY BENCH-MARK NM-367-1 BEARING ELEVATION 5210.60(MSL) LOCATED AT THE INTERSECTION OF OSUNA AMD SAN MATEO BLVD. NE.

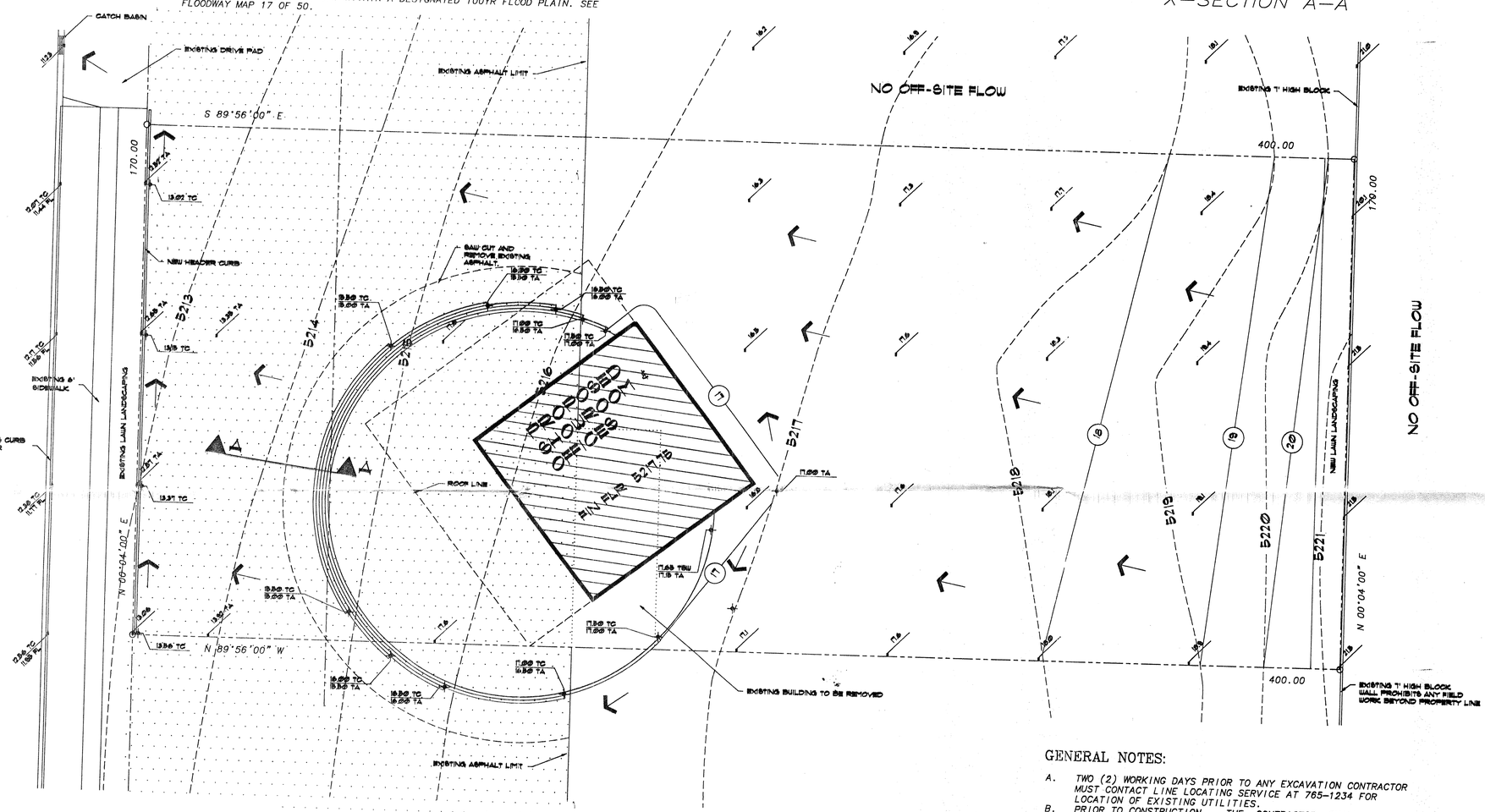
FLOOD INFORMATION

THIS PROPERTY DOES NOT LAY WITHIN A DESIGNATED 100YR FLOOD PLAIN. SEE FLOODWAY MAP 17 OF 50.

THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT FOR STORM RUNOFF DURING CONSTRUCTION; HE SHALL INSURE THAT THE FOLLOWING MEASURES ARE TAKEN:
- ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY THE CONSTRUCTION OF BERMS, DIKES, SWALES, PONDS AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUNOFF TO LEAVE THE SITE AND ENTERING ADJACENT PROPERTY.
- ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUNOFF FROM THE SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER THE PUBLIC STREETS.
- THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY OR ALL SEDIMENT WITHIN THE PUBLIC STREETS THAT HAVE BEEN ERODED FROM THE SITE AND DEPOSITED THERE.



X-SECTION A-A



TEMPORARY BENCH-MARK
(SEE BENCH-MARK INFORMATION)

ABBREVIATION LEGEND

TOP OF SIDEWALK	–	TSW
TOP OF CONCRETE (CONCRETE CURB OR STEPS)	–	TC
TOP OF ASPHALT	–	TA
DOWN-SPOUT	–	DS
FIRE HYDRANT	–	FH

SYMBOL LEGEND

EXISTING CONTOUR — 5102
DESIGN CONTOUR — 17
PROPOSED SPOT ELEVATION — 1148 TSW
PROPERTY LINE
EASEMENT LINE
FLOW DIRECTION
EXISTING SPOT ELEVATION — 1010.0

GENERAL NOTES:

- A. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION CONTRACTOR MUST CONTACT LINE LOCATING SERVICE AT 765-1234 FOR LOCATION OF EXISTING UTILITIES.
- B. 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.
- C. 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.
- D. ALL CONSTRUCTION WITHIN CITY RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.
- E. FINISH FLOOR ELEVATION SHOWN HEREON REFLECTS THE LEVEL PORTION OF THE BUILDING. SEE ARCHITECTURAL PLANS FOR DETAILS.

GRADING & DRAINAGE PLAN

SCALE: 1"=20.0'

0 5' 10' 20' 40'

RECEIVED
SEP 17 1990
HYDROLOGY DIVISION

R. D. LEE, JR.
NEW MEXICO
9312
REGISTERED PROFESSIONAL ENGINEER

9/12/90
REV 9/17/90