Location
The site is Lot 1, Block 18, Huning Highland Addition located at 405 Walter Street SE (southwest corner of Walter St and Lead Ave). See attached Zone Atlas page number K-14 for exact location.

Purpose
The purpose of this drainage report is to present a grading and drainage solution for the proposed site. We are requesting rough grading approval, as well as building permit approval.

Existing Drainage Conditions
The site for the most part drains north to Lead Avenue at a flow rate of 0.26 cf.. From there the runoff drains west. Based on the flood plain map 35001C0334E the site does not fall within a 100-year floodplain. No offsite enters this site.

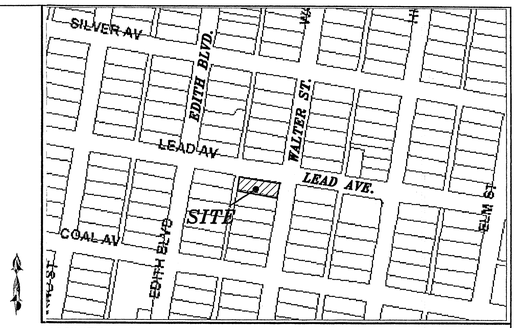
Proposed Conditions and On-Site Drainage Management Plan
The on-site drainage pattern will remain the same. The runoff for the most part will drain to the existing Alley to the west and then north to Lead Avenue at developed flow rate of 0.63 cfs. Only 9.50% (0.06 cfs) of the site will drain to Walter Street and then from there the runoff enters Lead Avenue. Under the developed conditions the runoff only increases by 0.36 cfs, and this increase will not have any impact on the street flow capacity nor the downstream storm sewer system.

Calculations
City of Albuquerque, Development Process Manual, Section 22.2, Hydrology Section, was used for runoff calculations.

NOTICE TO CONTRACTORS

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1985.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM AT 260-1990 FOR UTILITY LOCATING SYSTEM.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
5. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
7. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

ROUGH GRADING APPROVAL DATE



VICINITY MAP: PAGE K-14-Z

LEGAL DESCRIPTION:
LOT 1, BLOCK 18, HUNINGS HIGHLAND ADDITION

ADDRESS:
405 WALTER ST. SE

RUNOFF CALCULATIONS
(INPUT DATA FOR AHYMO CALCULATIONS)

The site is @ Zone 2

DEPTH (INCHES) @ 100-YEAR STORM

P60 = 2.01 inches

P360 = 2.35 inches

P1440 = 2.75 inches

DEPTH (INCHES) @ 10-YEAR STORM

P60 = 2.01 x 0.667 = 1.34 inches

P360 = 1.57

P1440 = 1.83

PROPOSED LAND TREATMENT

A=0%, B=23%, C=23%, D=54%

AHYMO INPUT FILE

```
* ZONE 2
**********************************************************************
*       100-YEAR,  6-HR STORM  (UNDER EXISITNG CONDITIONS)           *
**********************************************************************
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                     RAIN ONE=2.01 IN RAIN SIX=2.35 IN
                     RAIN DAY=2.75 IN DT=0.03333 HR
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                     PER A=100.00 PER B=0.00 PER C=0.00 PER D=0.00
                     TP=0.1333 HR MASS RAINFALL=-1
**********************************************************************
*       10-YEAR,  6-HR STORM  (UNDER EXISTING CONDITIONS)            *
**********************************************************************
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RAINFALL             TYPE=1 RAIN QUARTER=0.0 IN
                     RAIN ONE=1.34 IN RAIN SIX=1.57 IN
                     RAIN DAY=1.83 IN DT=0.03333 HR
* ON-SITE
COMPUTE NM HYD       ID=1 HYD NO=113.0 AREA=0.000254 SQ MI
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                     TP=0.1333 HR MASS RAINFALL=-1
**********************************************************************
*       100-YEAR,  6-HR STORM  (UNDER PROPOSED CONDITIONS)           *
**********************************************************************
START                TIME=0.0
RAINFALL             TYPE=1 RAIN QUARTER=0.0 IN
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                     RAIN DAY=2.75 IN DT=0.03333 HR

* ON-STIE
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*       10-YEAR,  6-HR STORM  (UNDER PROPOSED CONDITIONS)            *
**********************************************************************
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                     RAIN ONE=1.34 IN RAIN SIX=1.57 IN
                     RAIN DAY=1.83 IN DT=0.03333 HR

* ON-SITE
COMPUTE NM HYD       ID=1 HYD NO=113.1 AREA=0.000254 SQ MI
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                     TP=0.1333 HR MASS RAINFALL=-1
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FINISH
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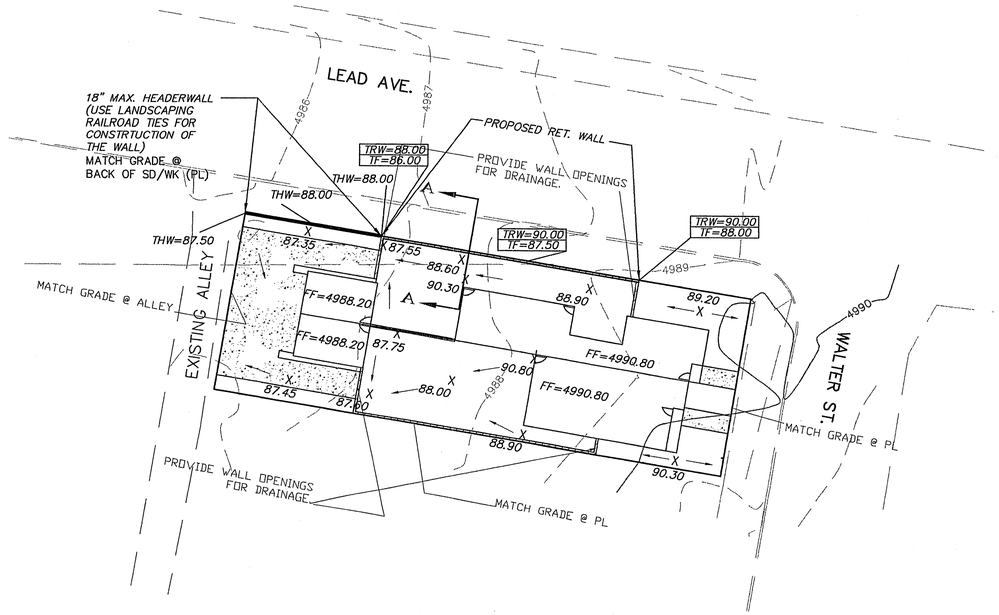

EROSION CONTROL PLAN AND POLLUTION PREVENTION NOTES

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT OUT OF EXISTING RIGHT-OF-WAY.
3. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL STORM RUNOFF ON SITE.
4. REPAIR OF DAMAGED FACILITIES AND CLEAN-UP OF SEDIMENT ACCUMULATION ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.
6. ALL THE DISTURBED AREAS MUST BE REVEGETATED.
7. THE TOTAL DISTURBANCE ON SITE IS LESS THAN ONE ACRE

LEGEND

- EXISTING CURB & GUTTER
- 5100 EXISTING CONTOUR (MAJOR)
- 5102 EXISTING CONTOUR (MINOR)
- BOUNDARY LINE
- EASEMENT
- EXISTING POWER LINES
- PROPOSED RETAINING WALL
- EXISTING DROP INLET
- EXISTING POWER POLE
- UTILITY PEDESTAL
- ELECTRICAL TRANSFORMER
- TRW=38.00 / TF=32.00 TOP OF RETAINING WALL / TOP OF FOOTING
- THW=34.00 TOP OF HEADERWALL
- PROPOSED CONCRETE

SUMMARY OUTPUT FILE

AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) - VERSION: 1997.02d RUN DATE (MON/DAY/YR) =08/28/2006
INPUT FILE = 636 USER NO.= AHYMO-I-9702c01000R31-AH

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	PAGE = 1 NOTATION
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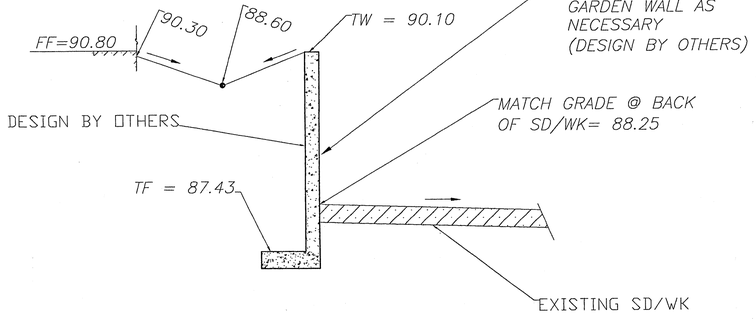
FINISH										



SECTION A-A
N.T.S

GRAPHIC SCALE
20 10 0 20
SCALE: 1"=20'

RECEIVED
AUG 28 2006
LAND DEVELOPMENT SECTION

SHAHAB BIAZAR
NEW MEXICO
13479
REGISTERED PROFESSIONAL ENGINEER

SHAHAB BIAZAR
P.E. #13479

ADVANCED ENGINEERING and CONSULTING, LLC
4416 ANAHEIM AVE., NE
ALBUQUERQUE, NEW MEXICO 87113
(505)899-5570

LEAD STUDIOS
GRADING AND DRAINAGE PLAN

DRAWING:	DRAWN BY:	DATE:	SHEET #
200636-GD.DWG	SBB	07-31-06	1 OF 1

LAST REVISION:08-28-2006