

#### LEGEND:

TOP OF CURB ELEVATION =  
CURB FLOWLINE ELEVATION =  
EXISTING SPOT ELEVATION =  
EXISTING CONTOUR ELEVATION =  
PROPOSED SPOT ELEVATION =  
PROPOSED CONTOUR ELEVATION =  
PROPOSED OR EXISTING CONCRETE SURFACE =  
EXISTING FENCE LINE =

#### LEGAL DESCRIPTION:

TRACT 351, M.R.G.C.D. MAP NO. 38, IN SECTION 18, T 10 N,  
R 3 E, N.M.P.M., ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.

#### BENCH MARK REFERENCE:

CITY OF ALBUQUERQUE SANITARY SEWER MANHOLE OPPOSITE  
SUBJECT SITE LOCATED ON 14 TH STREET S.W.; M.S.L.D.  
ELEVATION = 4952.10 .

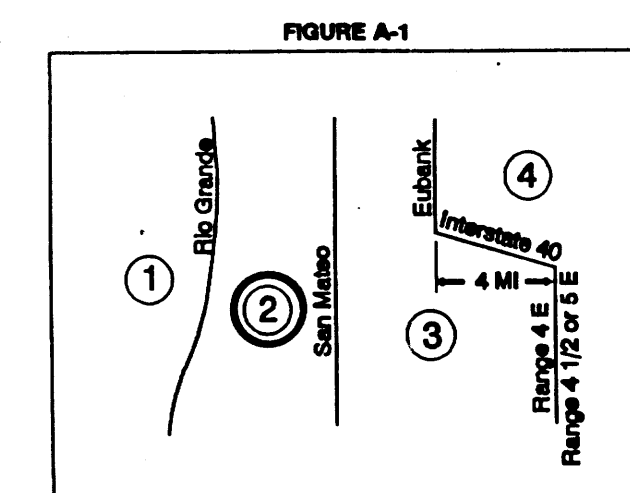
Zone	TABLE A-4. PEAK DISCHARGE (cfs/acre)			
	Treatment		100-YR	
	A	B	C	D
1	1.29 [0.00, 0.24]	2.03 [0.00, 0.78]	2.87 [0.47, 1.49]	4.37 [1.89, 2.89]
2	1.56 [0.00, 0.38]	2.28 [0.08, 0.95]	3.14 [0.80, 1.71]	4.70 [1.86, 3.14]
3	1.87 [0.00, 0.58]	2.80 [0.21, 1.19]	3.45 [0.78, 2.00]	5.02 [2.04, 3.39]
4	2.20 [0.05, 0.87]	2.82 [0.38, 1.45]	3.73 [1.00, 2.28]	5.25 [2.17, 3.57]

Zone	TABLE A-10. PEAK INTENSITY (IN/Hr at t <sub>c</sub> = 0.2 hour)	
	Intensity	100-YR
1	4.70 [1.84, 3.14]	
2	5.05 [2.04, 3.41]	
3	5.39 [2.21, 3.65]	
4	5.81 [2.34, 3.83]	

#### A.1 PRECIPITATION ZONES

Bernalillo County's four precipitation zones are indicated in TABLE A-1 and on FIGURE A-1.

TABLE A-1. PRECIPITATION ZONES	
Zone	Location
1	West of the Rio Grande
2	Between the Rio Grande and San Mateo
3	Between San Mateo and Eubank, North of Interstate 40; and between San Mateo and the East boundary of Range 4 East, South of Interstate 40
4	East of Eubank, North of Interstate 40; and East of the East boundary of Range 4 East, South of Interstate 40



Where a watershed extends across a zone boundary, use the zone which contains the largest portion of the watershed.

DPM SECTION 22.2 - HYDROLOGY  
January, 1993 Page A-4

TABLE A-4. LAND TREATMENTS	
Treatment	Land Condition
A	Soil uncompacted by human activity with 0 to 10 percent slopes. Native grasses, weeds and shrubs in typical densities with minimal disturbance to grading, groundcover and infiltration capacity. Croplands. Unfertilized.
B	Irrigated lawns, parks and golf courses with 0 to 10 percent slopes. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes greater than 10 percent and less than 20 percent.
C	Soil compacted by human activity. Minimal vegetation. Unpaved parking, roads, trails. Most vacant lots. Gravel or rock on plastic (desert landscaping). Irrigated lawns and parks with slopes greater than 10 percent. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes at 20 percent or greater. Native grass, weed and shrub areas with clay or clay loam soils and other soils of very low permeability as classified by SCS Hydrologic Soil Group D.
D	Impervious areas, pavement and roofs.

Most watersheds contain a mix of land treatments. To determine proportional treatments, measure respective subareas. In lieu of specific measurement for treatment D, the area percentages in TABLE A-5 may be employed.

#### DRAINAGE PLAN

THE FOLLOWING ITEMS CONCERNING 112 14TH ST. SW (TRACT 351 MAP 38) ARE CONTAINED HEREON:

1.) VICINITY MAP 2.) DRAINAGE PLAN 3.) DRAINAGE CALCULATIONS

#### EXISTING CONDITIONS

AS SHOWN BY THE VICINITY MAP, THE SITE CONTAINS APPROXIMATELY .1045 ACRES AND IS LOCATED SOUTH OF CENTRAL ON 14TH ST SW, IT IS THE SECOND PARCEL SOUTH FROM CENTRAL ON THE EAST SIDE OF 14TH ST. THE TOPOGRAPHY IS FLAT WITH A GRAVEL OVERLAY AND IS USED FOR PRIVATE PARKING. THE SITE IS AN INFILL SITE AND THERE IS CURRENTLY NO MASTER DRAINAGE PLAN FOR THIS AREA. ACCORDING TO THE FLOOD INSURANCE RATE MAP, PANEL 350002-0333, DATED SEPTEMBER 20, 1996, THIS SITE IS NOT LOCATED WITHIN A DESIGNATED FLOOD ZONE. (ZONE X 500-YEAR)

#### PROPOSED CONDITIONS

AS SHOWN BY THE PLAN, THE PROJECT CONSISTS OF A 1500 SF OFFICE WITH ASSOCIATED PAVED PARKING. ALL DEVELOPED RUN-OFF WILL BE ROUTED TOWARDS THE PROPOSED 24' FOOT DRIVEPAD ON 14TH ST.. FROM THAT POINT IT WILL TRAVEL NORTH TOWARDS THE EXISTING DROP INLET LOCATED ON 14TH ST SW. THE CALCULATIONS WHICH HERON, ANALYZE BOTH EXISTING AND DEVELOPED CONDITIONS FOR THE 100-YEAR, 6-HOUR RAINFALL EVENT. THE PROCEDURE FOR 40 ACRES 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 1193, HAS BEEN USED TO QUANTIFY THE PEAK RATE OF DISCHARGE AND VOLUME OF RUN-OFF GENERATED.

#### DOWNSTREAM CAPACITY

THERE IS AN EXISTING DROP INLET WEST OF THE SITE ON 14TH ST SW. THE INCREASE OF 28 CFS IS MINIMAL AND IT IS AN INFILL SITE. ALSO, THERE ARE NO OFF-SITE FLOWS ENTERING THE SITE.

#### EROSION CONTROL MEASURES:

THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT OF STORM RUNOFF DURING CONSTRUCTION; HE SHALL INSURE THAT THE FOLLOWING MEASURES ARE TAKEN:

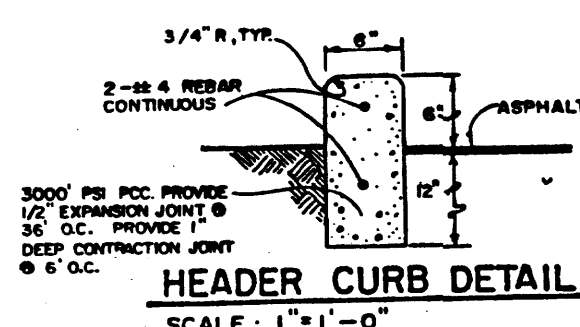
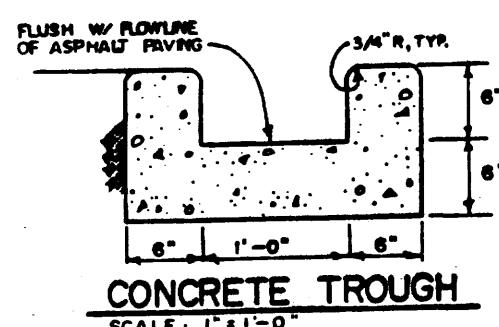
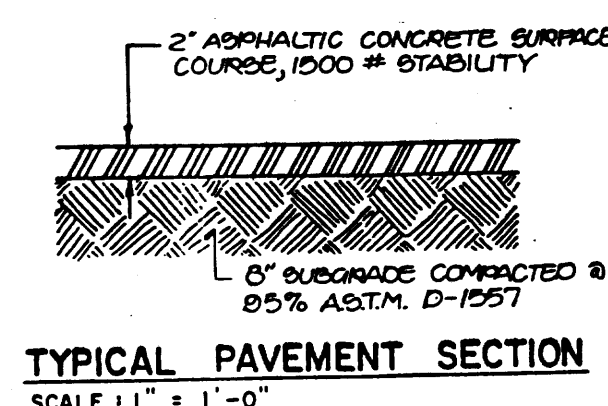
- 1.) ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY CONSTRUCTION OF BERMS, DIKES, SWALES, PONDS, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUNOFF FROM LEAVING THE SUBJECT SITE AND ENTERING ADJACENT PROPERTIES.
- 2.) ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUNOFF FROM THE SUBJECT SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER PUBLIC STREET RIGHT-OF-WAYS.
- 3.) THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY AND ALL SEDIMENT FROM PUBLIC STREETS THAT HAS BEEN ERODED FROM THE SUBJECT SITE AND DEPOSITED THEREON.

#### CONSTRUCTION NOTES:

- 1.) TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE AT 260-1990 FOR THE ACTUAL FIELD LOCATION OF THE EXISTING SURFACE OR SUB-SURFACE UTILITIES.
- 2.) PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION(S) OF ALL POTENTIAL OBSTRUCTIONS; SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM OF DELAY.
- 3.) ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- 4.) ALL CONSTRUCTION WITHIN PUBLIC STREET RIGHT-OF-WAY(S) SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE/BERNALILLO COUNTY STANDARDS AND PROCEDURES.

#### GENERAL NOTES:

- 1.) NO PERIMETER BOUNDARY CORNERS HAVE BEEN FIELD ESTABLISHED PER THIS SURVEY OF THE SUBJECT PROPERTY.
- 2.) NO SEARCH HAS BEEN MADE FOR EASEMENTS OF RECORD OTHER THAN SHOWN HEREON.



#### PROJECT DATA:

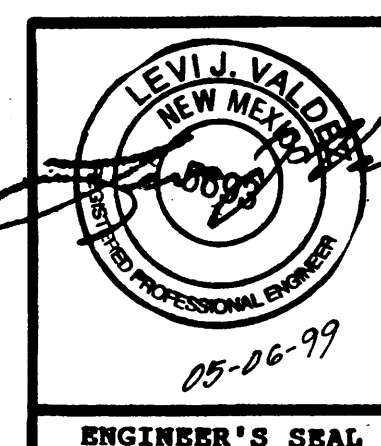
ADDRESS: 112 14TH STREET S.W.  
ZONING: SU-2/C-1  
SITE AREA: 0.1045 AC.  
PROPOSED BUILDING AREA: 1,539.0 SQ. FT.  
TYPE OF CONSTRUCTION :  
OCCUPANCY GROUP :  
PARKING SPACES REQUIRED: ("LEASEABLE AREA")  
REQUIRED = 4.0 SPACES  
PROVIDED = 4.0 SPACES

#### LANDSCAPE LEGEND:

PROPOSED ARIZONA ASH OR LOCUST TREE (8' HEIGHT MINIMUM, 2 1/2" CALIPER). =  
TAM JUNIPER(S), LOW SPREADING EVERGREEN =  
(5 GAL. MIN., 36" SPREAD)  
ARTEMISIA CANA (SILVER SAGE) =  
(5 GAL. MIN.)  
YUCCA PENDULA =  
(5 GAL. MIN.)  
\*\*\* GROUND COVER TO BE GRAVEL OVER LANDSCAPE PLASTIC  
\*\*\* IRRIGATION IS TO BE BY FAUCET/HAND HELD HOSE METHOD OR DRIP IRRIGATION SYSTEM AND AT OWNER(S) AND CONTRACTOR DISCRETION.

#### APPROVALS:

CITY OF ALBUQUERQUE - ZONING DEPT. DATE  
CITY OF ALBUQUERQUE - TRANSPORTATION DEPT. DATE  
CITY OF ALBUQUERQUE - SOLID WASTE DEPT. DATE  
(NOTE: REFUSE PICK-UP PER RESIDENTIAL USE REQUIREMENTS)



PROJECT OFFICE AREA = 0.1 ac.

ZONE 2  
PRECIPITATION: 360 = 2.35 in.  
1140 = 2.78 in.  
10day = 3.95 in.

TREATMENT	EXCESS PRECIPITATION	PEAK DISCHARGE
TREATMENT A	0.53 in.	1.56 cfs/acre
TREATMENT B	0.78 in.	2.28 cfs/acre
TREATMENT C	1.13 in.	3.14 cfs/acre
TREATMENT D	2.12 in.	4.70 cfs/acre

EXISTING CONDITIONS	AREA	PROPOSED CONDITIONS	AREA
TREATMENT A	0.1 ac.	TREATMENT A	0 ac.
TREATMENT B	0 ac.	TREATMENT B	0 ac.
TREATMENT C	0 ac.	TREATMENT C	0.032 ac.
TREATMENT D	0 ac.	TREATMENT D	0.073 ac.

#### EXISTING EXCESS PRECIPITATION:

Weighted E = ( 0.53 ) x ( 0.10 ) + ( 0.78 ) x ( 0.00 ) + ( 1.13 ) x ( 0.00 ) + ( 2.12 ) x ( 0.00 ) = 0.10  
= 0.53 in.  
V100-360 = ( 0.53 ) x ( 0.10 ) / 12 = 0.004615 ac-ft = 201 cf

#### EXISTING PEAK DISCHARGE:

Q100 = ( 1.56 ) x ( 0.10 ) + ( 2.28 ) x ( 0.00 ) + ( 3.14 ) x ( 0.00 ) + ( 4.70 ) x ( 0.00 ) = 0.18

#### PROPOSED EXCESS PRECIPITATION:

Weighted E = ( 0.53 ) x ( 0.00 ) + ( 0.78 ) x ( 0.00 ) + ( 1.13 ) x ( 0.03 ) + ( 2.12 ) x ( 0.07 ) = 0.10  
= 1.82 in.  
V100-360 = ( 1.82 ) x ( 0.10 ) / 12.0 = 0.015167 ac-ft = 690 cf

V100-1440 = ( 0.02 ) x ( 0.07 ) x ( 2.75 - 2.35 ) / 12 = 0.018250 ac-ft = 795 cf

V100-10day = ( 0.02 ) x ( 0.07 ) x ( 3.95 - 2.35 ) / 12 = 0.025510 ac-ft = 1111 cf

#### PROPOSED PEAK DISCHARGE:

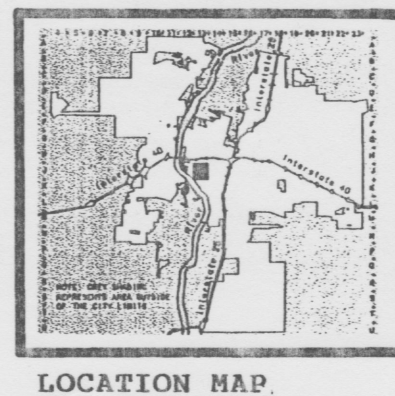
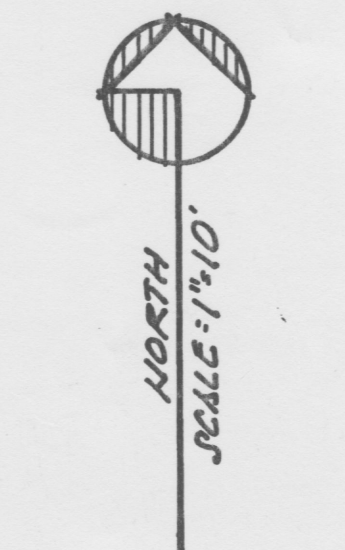
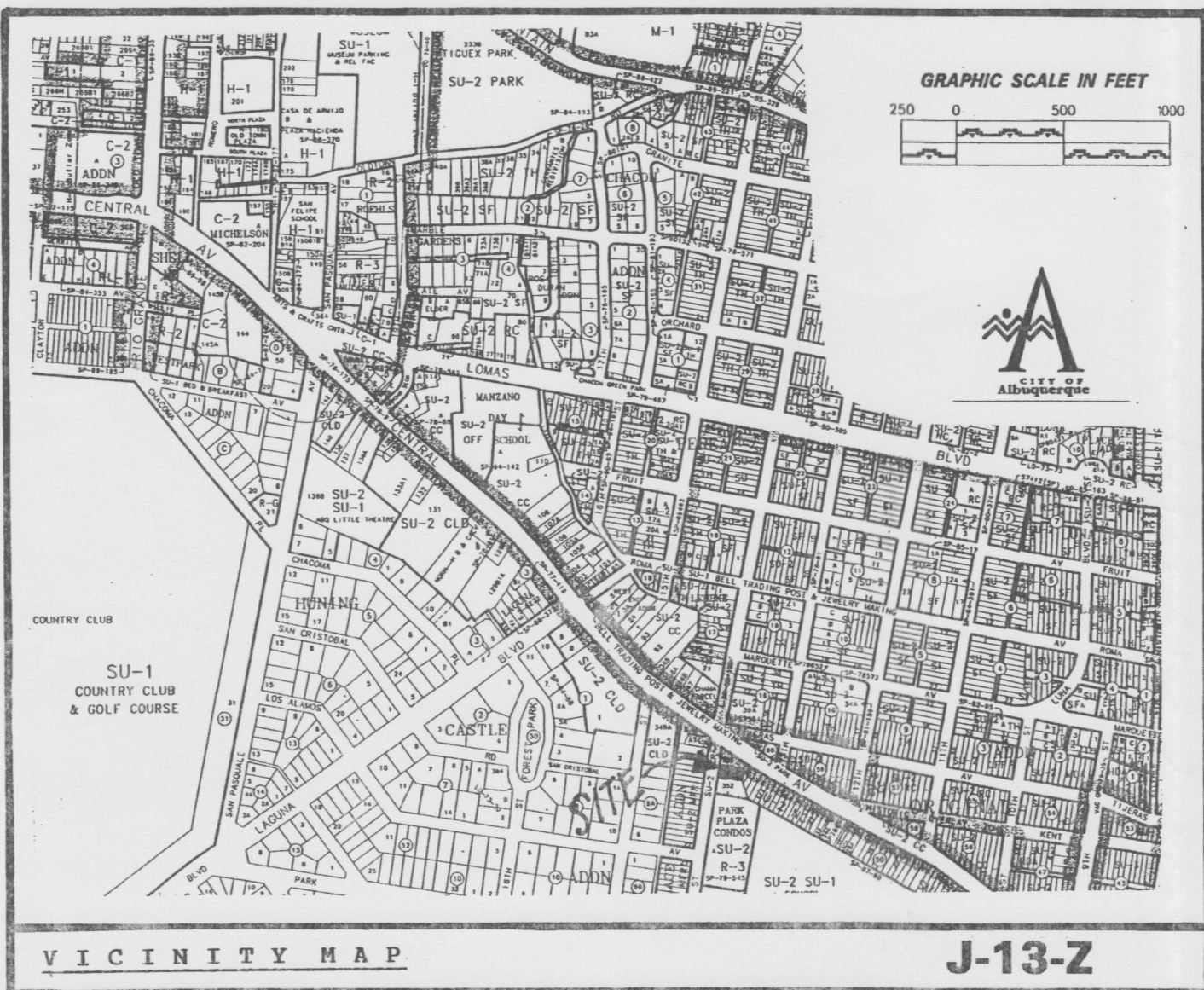
Q100 = ( 1.56 ) x ( 0.00 ) + ( 2.28 ) x ( 0.00 ) + ( 3.14 ) x ( 0.03 ) + ( 4.70 ) x ( 0.07 ) = 0.44

NOTE: ARCHITECT TO DESIGN ROOF DRAIN SYSTEM TO DISCHARGE ROOF RUNOFF TO PROPOSED ASPHALT PAVED PARKING LOT (VIA CONCRETE DRAIN TROUGH IF APPLICABLE).

RECEIVED  
MAY 06 1999  
HYDROLOGY SECTION

SITE PLAN & DRAINAGE PLAN  
OF  
TRACT 351, M.R.G.C.D. MAP NO. 38  
112 14TH STREET S.W.  
ALBUQUERQUE, NEW MEXICO  
MAY, 1999





#### LEGEND:

TOP OF CURB ELEVATION =  $70' - 52.37$   
 CURB FLOWLINE ELEVATION =  $12' - 51.01$   
 EXISTING SPOT ELEVATION =  $52.50$   
 EXISTING CONTOUR ELEVATION =  $52.50$   
 PROPOSED SPOT ELEVATION =  $52.35$   
 PROPOSED CONTOUR ELEVATION =  $52.50$   
 PROPOSED OR EXISTING CONCRETE SURFACE =

#### LEGAL DESCRIPTION:

TRACT 351, M.R.G.C.D. MAP NO. 38, IN SECTION 18, T 10 N,  
 R 3 E, N.M.P.M., ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.

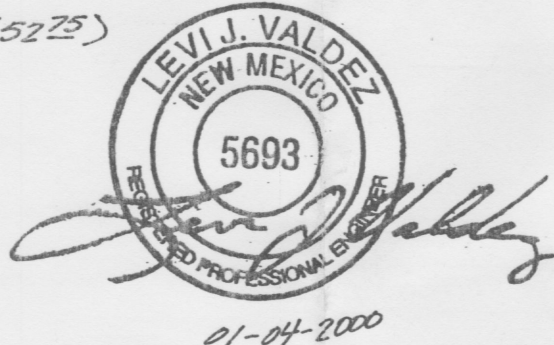
#### BENCH MARK REFERENCE:

CITY OF ALBUQUERQUE SANITARY SEWER MANHOLE OPPOSITE  
 SUBJECT SITE LOCATED ON 14 TH STREET S.W.; M.S.L.D.  
 ELEVATION = 4952.10

#### ENGINEER'S CERTIFICATION:

I, LEVI J. VALDEZ, NEW MEXICO REGISTERED PROFESSIONAL ENGINEER NO. 5693, LICENSED  
 AND REGISTERED UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT  
 AN ACTUAL ON THE GROUND FIELD SURVEY OF THE GRADES AND IMPROVEMENTS ARE IN "SUB-  
 STANTIAL COMPLIANCE" WITH THE APPROVED DRAINAGE PLAN AND SITE PLAN FOR SAID SITE.

"AS-BUILT" ELEVATIONS SHOWN THIS (5/2/99)



#### DRAINAGE PLAN

THE FOLLOWING ITEMS CONCERNING 112 14TH ST. SW (TRACT 351 MAP 38) ARE  
 CONTAINED HEREON:

1.) VICINITY MAP 2.) DRAINAGE PLAN 3.) DRAINAGE CALCULATIONS

#### EXISTING CONDITIONS

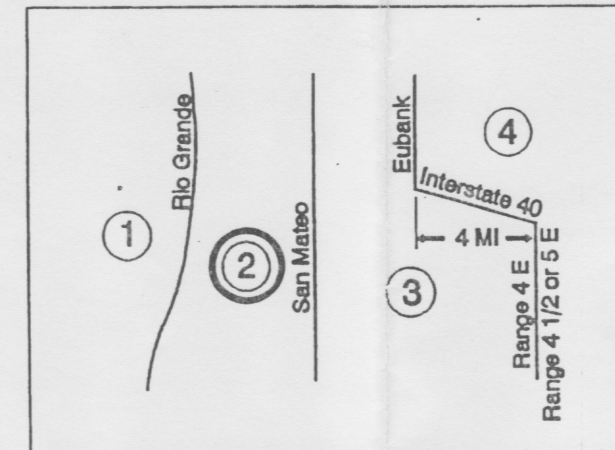
AS SHOWN BY THE VICINITY MAP, THE SITE CONTAINS APPROXIMATELY .1045  
 ACRES AND IS LOCATED SOUTH OF CENTRAL ON 14TH ST SW. IT IS THE SECOND  
 PARCEL SOUTH FROM CENTRAL ON THE EAST SIDE OF 14TH ST. THE  
 TOPOGRAPHY IS FLAT WITH A GRAVEL OVERLAY AND IS USED FOR PRIVATE  
 PARKING. THE SITE IS AN INFILL SITE AND THERE IS CURRENTLY NO MASTER  
 DRAINAGE PLAN FOR THIS AREA. ACCORDING TO THE FLOOD INSURANCE RATE  
 MAP, PANEL 350002-0333, DATED SEPTEMBER 20, 1996, THIS SITE IS NOT LOCATED  
 WITHIN A DESIGNATED FLOOD ZONE (ZONE X 500-YEAR)

#### A.1 PRECIPITATION ZONES

Bernalillo County's four precipitation zones are indicated in TABLE A-1 and on  
 FIGURE A-1.

TABLE A-1. PRECIPITATION ZONES	
Zone	Location
1	West of the Rio Grande
2	Between the Rio Grande and San Mateo
3	Between San Mateo and Eubank, North of Interstate 40; and between San Mateo and the East boundary of Range 4 East, South of Interstate 40
4	East of Eubank, North of Interstate 40; and East of the East boundary of Range 4 East, South of Interstate 40

FIGURE A-1



Where a  
 watershed  
 extends across a  
 zone boundary,  
 use the zone  
 which contains  
 the largest  
 portion of the  
 watershed.

DPM SECTION 22.2 - HYDROLOGY  
 January, 1993 Page A-4

TABLE A-4. LAND TREATMENTS	
Treatment	Land Condition
A	Soil uncompacted by human activity with 0 to 10 percent slopes. Native grasses, weeds and shrubs in typical densities with minimal disturbance to grading, groundcover and infiltration capacity. Croplands. Unlined arroyos.
B	Irrigated lawns, parks and golf courses with 0 to 10 percent slopes. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes greater than 10 percent and less than 20 percent.
C	Soil compacted by human activity. Minimal vegetation. Unpaved parking, roads, trails. Most vacant lots. Gravel or rock on plastic (desert landscaping). Irrigated lawns and parks with slopes greater than 10 percent. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes at 20 percent or greater. Native grass, weed and shrub areas with clay or clay loam soils and other soils of very low permeability as classified by SCS Hydrologic Soil Group D.
D	Impervious areas, pavement and roofs.

Most watersheds contain a mix of land treatments. To determine proportional  
 treatments, measure respective subareas. In lieu of specific measurement for  
 treatment D, the areal percentages in TABLE A-5 may be employed.

#### EROSION CONTROL MEASURES:

THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT OF STORM RUNOFF  
 DURING CONSTRUCTION; HE SHALL INSURE THAT THE FOLLOWING MEASURES ARE TAKEN:

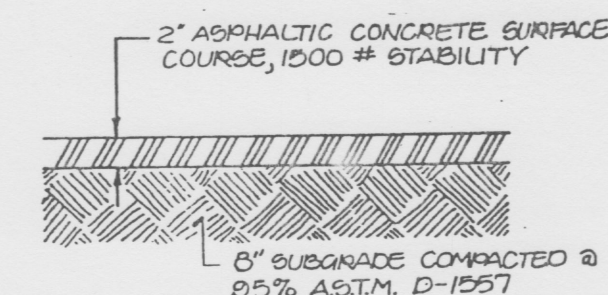
- ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY CONSTRUCTION OF  
 BERMS, DIKES, SWALES, PONDS, AND OTHER TEMPORARY GRADING AS REQUIRED  
 TO PREVENT STORM RUNOFF FROM LEAVING THE SUBJECT SITE AND ENTERING  
 ADJACENT PROPERTIES.
- ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM  
 STORM WATER RUNOFF FROM THE SUBJECT SITE. NO SEDIMENT BEARING WATER  
 SHALL BE PERMITTED TO ENTER PUBLIC STREET RIGHT-OF-WAYS.
- THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY AND ALL  
 SEDIMENT FROM PUBLIC STREETS THAT HAS BEEN ERODED FROM THE SUBJECT  
 SITE AND DEPOSITED THEREON.

#### CONSTRUCTION NOTES:

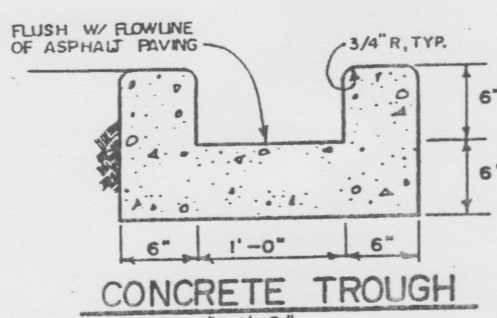
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT  
 LINE LOCATING SERVICE AT 260-1990 FOR THE ACTUAL FIELD LOCATION OF  
 THE EXISTING SURFACE OR SUB-SURFACE UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE  
 HORIZONTAL AND VERTICAL LOCATION(S) OF ALL POTENTIAL OBSTRUCTIONS;  
 SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO  
 THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM OF DELAY.
- ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH ALL  
 APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES AND REGULATIONS CON-  
 CERNING CONSTRUCTION SAFETY AND HEALTH.
- ALL CONSTRUCTION WITHIN PUBLIC STREET RIGHT-OF-WAY(S) SHALL BE PERFORM-  
 ED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE/BERNALILLO COUNTY  
 STANDARDS AND PROCEDURES.

#### GENERAL NOTES:

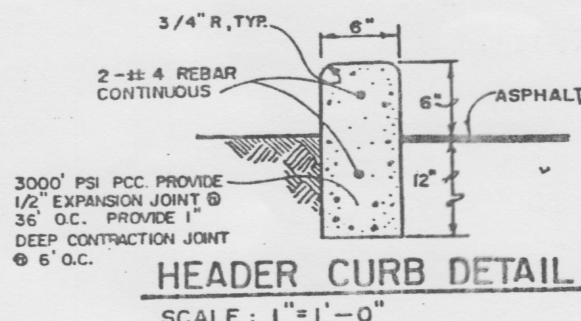
- NO PERIMETER BOUNDARY CORNERS HAVE BEEN FIELD ESTABLISHED PER THIS  
 SURVEY OF THE SUBJECT PROPERTY.
- NO SEARCH HAS BEEN MADE FOR EASEMENTS OF RECORD OTHER THAN SHOWN HEREON.



TYPICAL PAVEMENT SECTION  
 SCALE: 1" = 1'-0"



CONCRETE TROUGH  
 SCALE: 1" = 1'-0"



HEADER CURB DETAIL  
 SCALE: 1" = 1'-0"

#### PROJECT DATA:

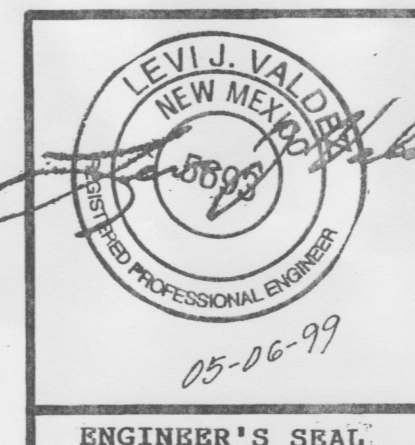
ADDRESS: 112 14TH STREET S.W.  
 ZONING: SU-2/C-1  
 SITE AREA: 0.1045 AC.  
 PROPOSED BUILDING AREA: 1,539.0 SQ. FT.  
 TYPE OF CONSTRUCTION: \_\_\_\_\_  
 OCCUPANCY GROUP: \_\_\_\_\_  
 PARKING SPACES REQUIRED: ("LEASEABLE AREA")  
 REQUIRED = 4.0 SPACES  
 PROVIDED = 4.0 SPACES

#### LANDSCAPE LEGEND:

PROPOSED ARIZONA ASH OR LOCUST TREE (8' HEIGHT MINIMUM, 2 1/2" CALIPER). =   
 TAM JUNIPER(S), LOW SPREADING EVERGREEN =   
 (5 GAL. MIN., 36" SPREAD)  
 ARTEMISIA CANA (SILVER SAGE) =   
 (5 GAL. MIN.)  
 YUCCA PENDULA =   
 (5 GAL. MIN.)  
 \*\*\* GROUND COVER TO BE GRAVEL OVER LANDSCAPE PLASTIC  
 \*\*\* IRRIGATION IS TO BE BY FAUCET/HAND HELD HOSE METHOD OR DRIP IRRIGATION  
 SYSTEM AND AT OWNER(S) AND CONTRACTOR DISCRETION.

#### APPROVALS:

CITY OF ALBUQUERQUE - ZONING DEPT. DATE: 5-21-99  
  
 CITY OF ALBUQUERQUE - TRANSPORTATION DEPT. DATE: 5/21/99  
  
 CITY OF ALBUQUERQUE - SOLID WASTE DEPT. DATE: May 21-99  
 (NOTE: REFUSE PICK-UP PER RESIDENTIAL USE REQUIREMENTS)



#### PROPOSED CONDITIONS

AS SHOWN BY THE PLAN, THE PROJECT CONSISTS OF A 1500 SF OFFICE WITH  
 ASSOCIATED PAVED PARKING. ALL DEVELOPED RUN-OFF WILL BE ROUTED  
 TOWARDS THE PROPOSED 24' FOOT DRIVEPAD ON 14TH ST. FROM THAT POINT IT  
 WILL TRAVEL NORTH TOWARDS THE EXISTING DROP INLET LOCATED ON 14TH  
 ST SW. THE CALCULATIONS WHICH HEREON, ANALYZE BOTH EXISTING AND  
 DEVELOPED CONDITIONS FOR THE 100-YEAR, 6-HOUR RAINFALL EVENT. THE  
 PROCEDURE FOR 40 ACRES 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 1193, HAS BEEN USED  
 TO QUANTIFY THE PEAK RATE OF DISCHARGE AND VOLUME OF RUN-OFF  
 GENERATED.

#### DOWNSTREAM CAPACITY

THERE IS AN EXISTING DROP INLET WEST OF THE SITE ON 14TH ST SW. THE  
 INCREASE OF .28 CFS IS MINIMAL AND IT IS AN INFILL SITE. ALSO, THERE ARE NO  
 OFF-SITE FLOWS ENTERING THE SITE.

PROJECT OFFICE AREA = 0.1 ac.

ZONE 2  
 PRECIPITATION: 360 = 2.35 in.  
 1140 = 2.75 in.  
 10day = 3.95 in.

TREATMENT	AREA	EXCESS PRECIPITATION	PEAK DISCHARGE
TREATMENT A	0.53 in.	0.53 in.	1.56 cfs/ac.
TREATMENT B	0.78 in.	0.78 in.	2.28 cfs/ac.
TREATMENT C	1.13 in.	1.13 in.	3.14 cfs/ac.
TREATMENT D	2.12 in.	2.12 in.	4.70 cfs/ac.

EXISTING CONDITIONS	AREA	PROPOSED CONDITIONS	AREA
TREATMENT A	0.1 ac.	TREATMENT A	0 ac.
TREATMENT B	0 ac.	TREATMENT B	0 ac.
TREATMENT C	0 ac.	TREATMENT C	0.032 ac.
TREATMENT D	0 ac.	TREATMENT D	0.073 ac.

#### EXISTING EXCESS PRECIPITATION:

Weighted E =  $(0.53 \times 0.10) + (0.78 \times 0.00) + (1.13 \times 0.00) + (2.12 \times 0.00) = 0.53$   
 $= 0.53$   
 $V_{100-360} = (0.53 \times 0.10) / 12 = 0.004815$  ac-ft = 201 cf

#### EXISTING PEAK DISCHARGE:

$Q_{100} = (1.56 \times 0.10) + (2.28 \times 0.00) + (3.14 \times 0.00) + (4.70 \times 0.00) = 0.16$

#### PROPOSED EXCESS PRECIPITATION:

Weighted E =  $(0.53 \times 0.00) + (0.78 \times 0.00) + (1.13 \times 0.03) + (2.12 \times 0.07) = 1.82$   
 $= 1.82$   
 $V_{100-360} = (1.82 \times 0.10) / 12 = 0.015830$  ac-ft = 690 cf  
 $V_{100-1440} = (0.02 \times 0.07) \times (2.75 - 2.35) / 12 = 0.018250$  ac-ft = 795 cf  
 $V_{100-10day} = (0.02 \times 0.07) \times (3.95 - 2.35) / 12 = 0.025510$  ac-ft = 1111 cf

#### PROPOSED PEAK DISCHARGE:

$Q_{100} = (1.56 \times 0.00) + (2.28 \times 0.00) + (3.14 \times 0.03) + (4.70 \times 0.07) = 0.44$

#### "ENGINEER'S CERTIFICATION"

SITE PLAN & DRAINAGE PLAN  
 OF  
 TRACT 351, M.R.G.C.D. MAP NO. 38  
 112 14TH STREET S.W.  
 ALBUQUERQUE, NEW MEXICO  
 MAY, 1999  
 (CERTIFICATION: JAN. 4, 2000)