

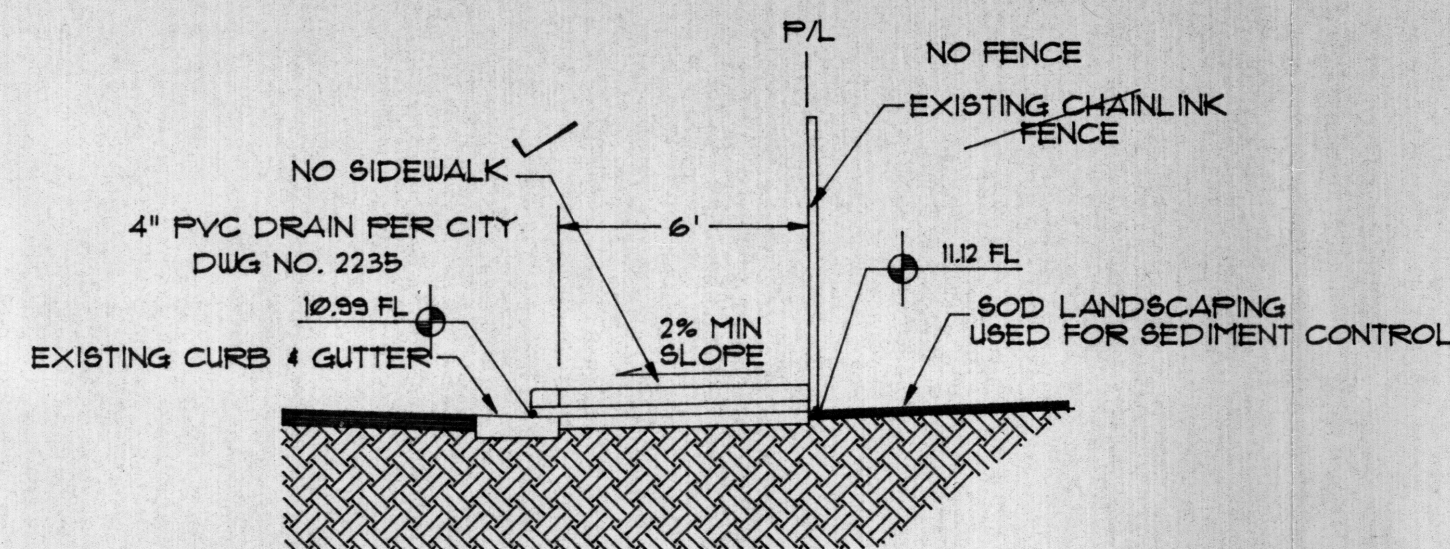
LEGAL DESCRIPTION
 LOT "D"
 TRACT 4, LANDS OF LOS ANGELES INVESTORS
 ALBUQUERQUE, BERNALILLO COUNTY,
 NEW MEXICO.

DRAINAGE CALCULATIONS

- I. REFERENCES:
 A. SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2, DESIGN CRITERIA FOR THE CITY OF ALBUQUERQUE, NEW MEXICO IN COOPERATION WITH BERNALILLO COUNTY, NEW MEXICO AND THE ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY.
 B. FLOODWAY, FLOOD BOUNDARY AND FLOODWAY MAP, CITY OF ALBUQUERQUE, NEW MEXICO, PANEL 9 OF 50.
 C. ZONE ATLAS PAGE C-17-Z.
- II. GENERAL INFORMATION:
 A. SITE LIES IN ZONE TWO(2) (SEE REF. A, PAGE A-1)
 B. 100 YEAR, 6 HOUR RAINFALL CRITERIA
 C. TIME OF CONCENTRATION, T_c ; $T_c = 0.2$ hr (12 MINUTES).
- III. IMPERVIOUSNESS:
- | TREATMENT TYPE | TYPES OF SURFACES | EXISTING SQ. FT. | EXISTING ACRES | PROPOSED SQ. FT. | PROPOSED ACRES |
|-----------------|-------------------|------------------|----------------|------------------|----------------|
| A | UNDEVELOPED | 43568 | 1.0002 | 0 | 0.0000 |
| B | LANDSCAPING | 0 | 0.0000 | 3794 | 0.0871 |
| C | COMPACTED/VACANT | 0 | 0.0000 | 17915 | 0.4113 |
| D | IMPERVIOUS | 0 | 0.0000 | 21859 | 0.5018 |
| TOTAL AREA (TA) | | 43568 | 1.0002 | 43568 | 1.0002 |
- IV. PEAK DISCHARGE 100 YEAR (REF. A, TABLE A-9):
- | TREATMENT TYPE | TYPES OF SURFACES | EXISTING CFS/Ac | EXISTING Qp(100) | PROPOSED CFS/Ac | PROPOSED Qp(100) |
|--------------------------|-------------------|-----------------|------------------|-----------------|------------------|
| A | UNDEVELOPED | 1.56 | 1.56 | 0.00 | 0.00 |
| B | LANDSCAPING | 2.28 | 0.00 | 2.28 | 0.20 |
| C | COMPACTED/VACANT | 3.14 | 0.00 | 3.14 | 1.29 |
| D | IMPERVIOUS | 4.70 | 0.00 | 4.70 | 2.36 |
| PEAK DISCHARGE FROM SITE | | 1.56 | CFS | 3.85 | CFS |
- V. PEAK DISCHARGE 10 YEAR (REF. A, TABLE A-9):
- | TREATMENT TYPE | TYPES OF SURFACES | EXISTING CFS/Ac | EXISTING Qp(10) | PROPOSED CFS/Ac | PROPOSED Qp(10) |
|--------------------------|-------------------|-----------------|-----------------|-----------------|-----------------|
| A | UNDEVELOPED | 0.38 | 0.38 | 0.00 | 0.00 |
| B | LANDSCAPING | 0.95 | 0.00 | 0.95 | 0.08 |
| C | COMPACTED/VACANT | 1.71 | 0.00 | 1.71 | 0.70 |
| D | IMPERVIOUS | 3.14 | 0.00 | 3.14 | 1.58 |
| PEAK DISCHARGE FROM SITE | | 0.38 | CFS | 2.36 | CFS |
- VI. WEIGHTED "E" 100 YEAR, 6 HR. (REF. A, TABLE A-8):
- | TREATMENT TYPE | TYPES OF SURFACES | EXISTING E | EXISTING EXA/TA | PROPOSED E | PROPOSED EXA/TA |
|---------------------|-------------------|------------|-----------------|------------|-----------------|
| A | UNDEVELOPED | 0.53 | 0.53 | 0.00 | 0.00 |
| B | LANDSCAPING | 0.78 | 0.00 | 0.78 | 0.07 |
| C | COMPACTED/VACANT | 1.13 | 0.00 | 1.13 | 0.46 |
| D | IMPERVIOUS | 2.12 | 0.00 | 2.12 | 1.06 |
| WEIGHTED "E" FACTOR | | 0.53 | IN | 1.60 | IN |
- VII. VOLUME 100 YEAR, V(360) (REF. A, TABLE A-8):
- EXISTING $1.60 \times 1.0002/12 = 0.04$ AC. FT.
 1924.25 CU. FT.
- PROPOSED $0.53 \times 1.0001/12 = 0.13$ AC. FT.
 5795.36 CU. FT.

GENERAL NOTES:

- A. 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.



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 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.

CERTIFICATION

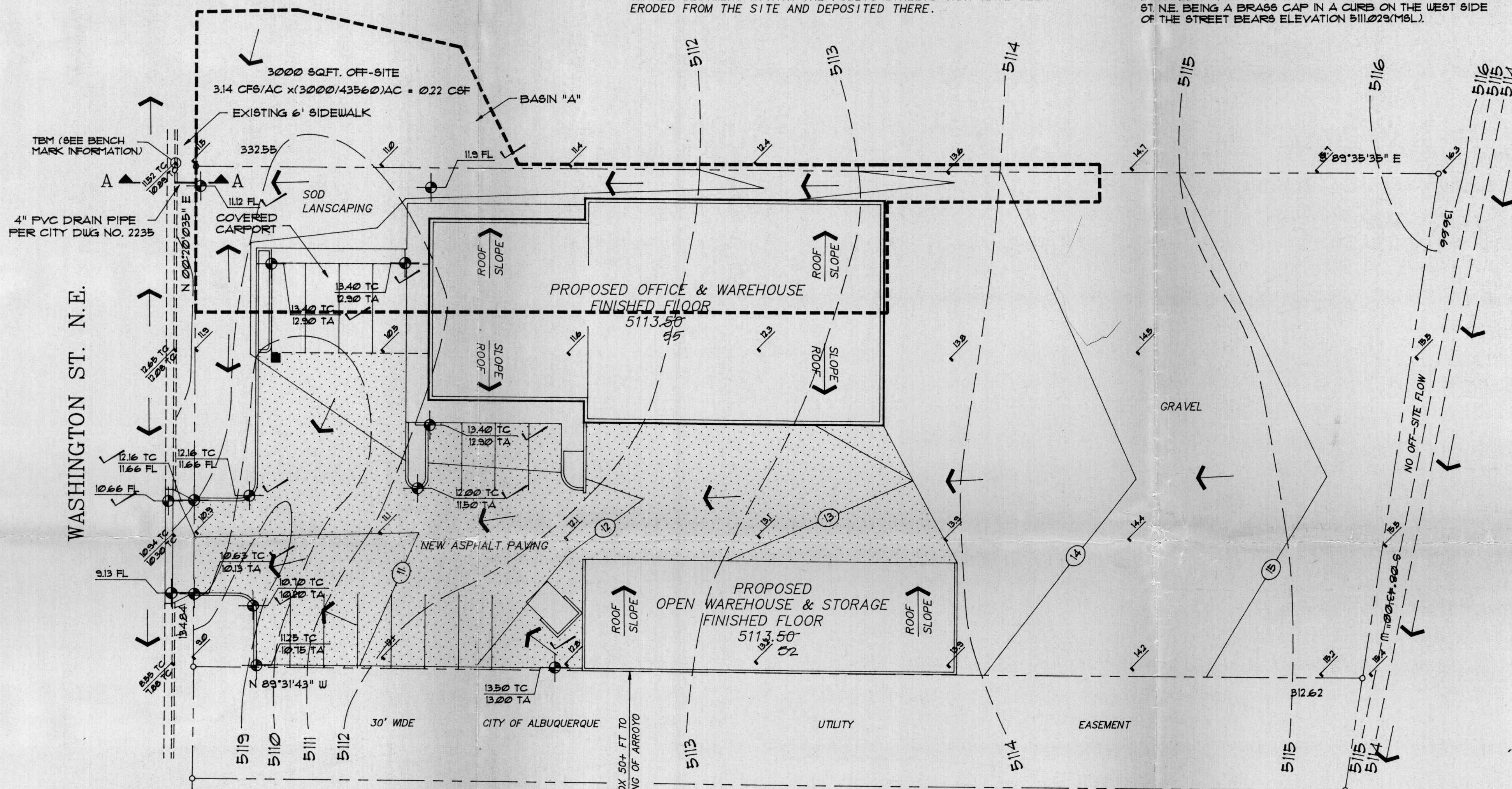
I R.G. Lee, Jr., Registered Professional Engineer hereby certify the improvements shown hereon are in substantial compliance with the approved drainage plan.

R.G. LEE, JR.

Date

BENCH-MARK INFORMATION

TEMPORARY BENCH-MARK BEING THE TOP OF CURB SPRAY PAINTED ORANGE (TBM) BEARS ELEVATION 5113.2 MSL, REFERENCE TO CITY BENCH-MARK 8-CIT LOCATED NORTH OF PASEO DEL NORTE ON WASHINGTON ST. N.E. BEING A BRASS CAP IN A CURB ON THE WEST SIDE OF THE STREET BEARS ELEVATION 5112.23(MSL).



S.O.19 SIGN-OFF:

1. An excavation/construction permit will be required before beginning any work within the City right-of-way. Approved copy of this plan must be submitted at the time of application for permit.
2. All work detailed in this plan to be performed, except as otherwise stated or provided herein, shall be constructed in accordance with City of Albuquerque Interim Standard Specification for Public Works Construction 1985.
3. Two workings prior to any excavation, contractor must contact line locating Services at (505) 260-1990 for locating existing utilities.
4. Prior to construction, the contractor shall excavate and verify the horizontal and vertical location of all construction. 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 residential street use.
6. Maintenance of these facilities shall be the responsibility of the Owner of property served.

APPROVAL	NAME	DATE	Title:
Hydrology			Office & Storage Facilities
Inspector			Permit No.
A.C.E./Field			Sheet 1 of 1
			Map Number
			C17/D17

4" PVC DRAIN PIPE HYDRAULICS

On-Site
 Total Area(TA) = 43,568 Sq Ft
 Basin "A" (BA) = 7,887 Sq Ft
 BA/TA = 0.1806 or 18.06%

Off-Site
 Total Area(TA) = 3,000 Sq Ft
 Total Qp(100) = 0.22 CFS

Total discharge Via 4" Pipe
 $0.70 + 3.85 = 0.92$ CFS

CAPACITY OF 4" PVC DRAIN PIPE

C = 0.60
 A = 0.26 Sq Ft
 H = 0.55 Ft
 Q = 0.93 CFS

Thus $0.93 > 0.92$ CFS

SYMBOL LEGEND

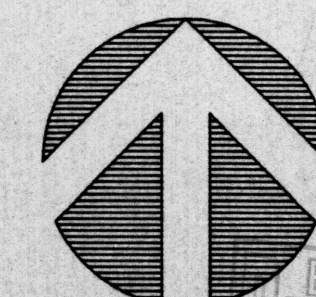
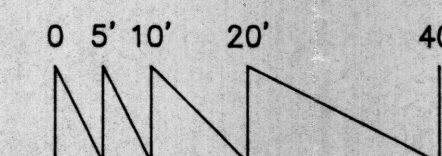
EXISTING CONTOUR
 ASBUILT CONTOUR
 ASBUILT SPOT ELEVATION
 PROPERTY LINE
 EASEMENT LINE
 FLOW DIRECTION
 EXISTING SPOT ELEVATION

ABBREVIATION LEGEND

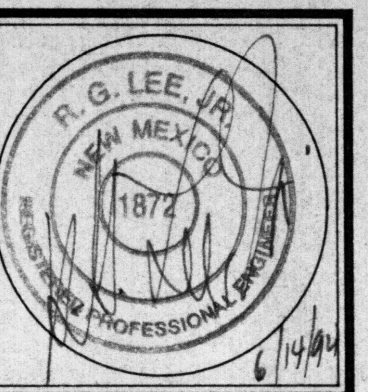
TOP OF CONC APRON - TCA
 TOP OF CURB - TC
 TOP OF ASPHALT - TA

ASBUILT GRADING & DRAINAGE PLAN

SCALE: 1"=20.0'



RECEIVED
 JUN 17 1994
 HYDROLOGY DIVISION



Job Number
 9214
 Date
 APRIL 20 1992
 Revised
 JULY 27 1993

ASBUILT
 GRADING & DRAINAGE PLAN

Sheet Title

Checked by

Drawn by

Miller and Associates
 ARCHITECTS
 5923 Richmond N.E.
 ALBUQUERQUE, NEW MEXICO

PROPOSED OFFICE & STORAGE FACILITIES
 ALBUQUERQUE, NEW MEXICO

Job Title

Sheet Number

of