

VICINITY MAP H-16  
SCALE 1" = 700'

#### ADDRESS

XXXX LOS ARBOLES AVENUE NE

#### LEGAL DESCRIPTION

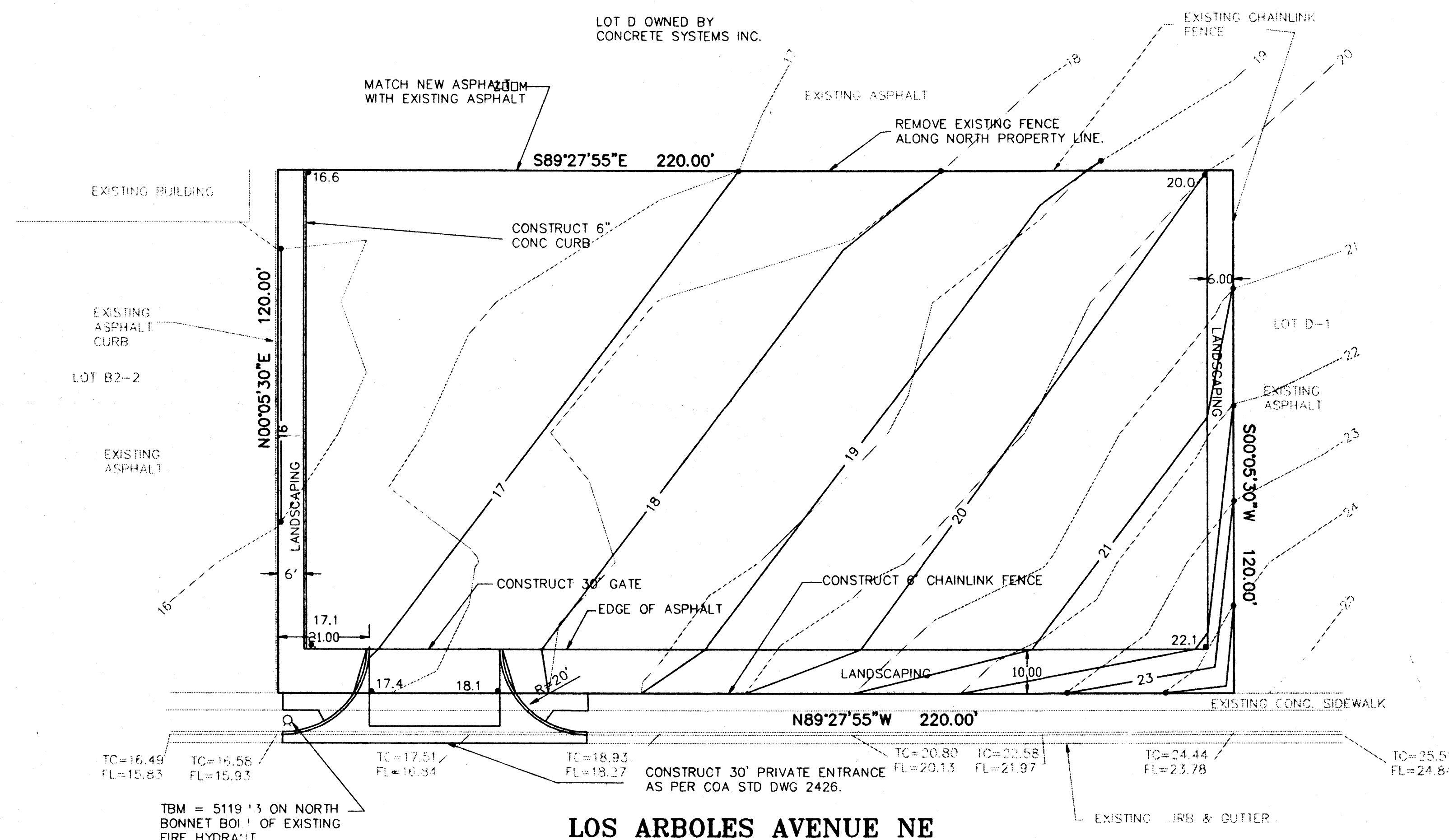
TRACT C, BLOCK D, DUKE CITY INDUSTRIAL ADDN

#### BENCHMARK

ACS BENCHMARK 1-G16 LOCATED 1000' EAST OF THE INTERSECTION OF RICHMOND AND CANDELARIA ON THE SOUTH SIDE OF THE STREET. ELEVATION = 5119.15

#### LEGEND

- 35.8 EXISTING SPOT ELEVATION
- 36.20 NEW SPOT ELEVATION
- 36 EXISTING CONTOUR
- 35 NEW CONTOUR
- SWALE
- ✓ VERIFIED ELEVATION
- 36.2 AS-BUILT ELEVATION
- BASIN BOUNDARY



## GRADING AND DRAINAGE PLAN FOR CONCRETE SYSTEMS INC.

#### DRAINAGE PLAN

THE FOLLOWING ITEMS CONCERNING THE CONCRETE SYSTEMS, INC. GRADING AND DRAINAGE PLAN ARE CONTAINED HEREON:

1. VICINITY MAP
2. GRADING PLAN
3. CALCULATIONS

THE PROPOSED IMPROVEMENTS ARE LOCATED ON THE NORTH SIDE OF LOS ARBOLES NE, JUST EAST OF RICHMOND NE. THE SITE IS UNDEVELOPED. THE SITE SLOPES FROM SOUTHEAST TO NORTHWEST. THE SITE DOES NOT LIE WITHIN A DESIGNATED FLOOD HAZARD ZONE.

THE SITE IS HIGHER THAN THE LAND TO THE NORTH AND WEST AND LOWER THAN THE LAND TO THE EAST AND THE STREET TO THE SOUTH. THE LOT TO THE EAST IS GRADED TO DRAIN TO THE NORTH AWAY FROM THIS SITE AND THE STREET HAS CURB AND GUTTER THAT MAINTAINS THE FLOWS WITHIN THE STREET. THE LAND TO THE NORTH OF THIS SITE IS OWNED BY CONCRETE SYSTEMS, INC AND IS USED AS OPEN YARD STORAGE. OFFSITE FLOWS ENTERING THIS SITE WILL BE NEGLIGIBLE.

THE GRADING PLAN 1) EXISTING AND PROPOSED GRADES, INDICATED BY SPOT ELEVATIONS AND CONTOURS AT 1'-0" INTERVALS, 2) CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS, 3) THE LIMIT AND CHARACTER OF THE EXISTING IMPROVEMENTS AND 4) THE LIMIT AND CHARACTER OF THE PROPOSED IMPROVEMENTS. THE SITE IS CURRENTLY UNDEVELOPED. THE PROPOSED IMPROVEMENTS CONSIST OF PAVEMENT, FENCING AND LANDSCAPING. THE SITE WILL BE USED AS A CONTINUATION OF THE OPEN STORAGE TO THE NORTH. THE SITE WILL DRAIN TO THE NORTH ONTO THE EXISTING OPEN STORAGE YARD. THE RUNOFF WILL MERGE WITH RUNOFF FROM THE EXISTING SITE AND DISCHARGE ONTO RICHMOND IN ACCORDANCE WITH THE DRAINAGE PLAN THAT WAS PREPARED BY MARK GOODWIN & ASSOCIATES AND APPROVED IN NOVEMBER 1994.

THE CALCULATIONS, WHICH APPEAR BELOW, ANALYZE THE EXISTING AND PROPOSED CONDITIONS FOR THE 6-HOUR, 100-YEAR RAINFALL EVENT. THE ANALYSIS IS IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, VOLUME II. AS SHOWN BY THESE CALCULATIONS THE RATE AND VOLUME OF RUNOFF WILL INCREASE.

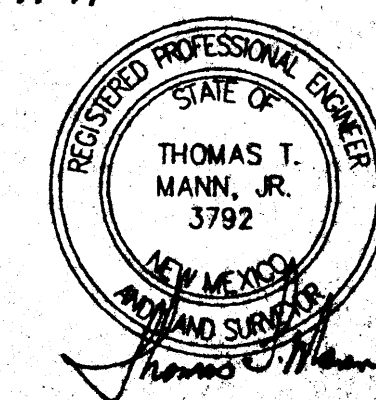
#### CALCULATIONS

PRECIPITATION ZONE = 2  
AREA = 0.61 ACRES  
EXISTING CONDITIONS  
LAND TREATMENT C=100%  
 $E = 1.13 \times 1.00 = 1.13$  INCHES  
 $V = 1.13 \times 0.61 / 12 = 0.06$  ACRE FEET  
 $Q = 3.14 \times 1.00 \times 0.61 = 1.92$  CFS  
DEVELOPED CONDITIONS  
LAND TREATMENT B=13% D=87%  
 $E = 0.78 \times 0.13 + 2.12 \times 0.87 = 1.95$  INCHES  
 $V = 1.95 \times 0.61 / 12 = 0.10$  ACRE FEET  
 $Q = (2.28 \times 0.13 + 4.70 \times 0.87) \times 0.61 = 2.68$  CFS  
INCREASE IN VOLUME OF RUNOFF =  $0.10 - 0.06 = 0.04$  ACRE FEET  
INCREASE IN RATE OF RUNOFF =  $2.68 - 1.92 = 0.76$  CFS

RECEIVED  
JAN 19 1999  
HYDROLOGY SECTION

DRAWING SCALE: 1" = 20'

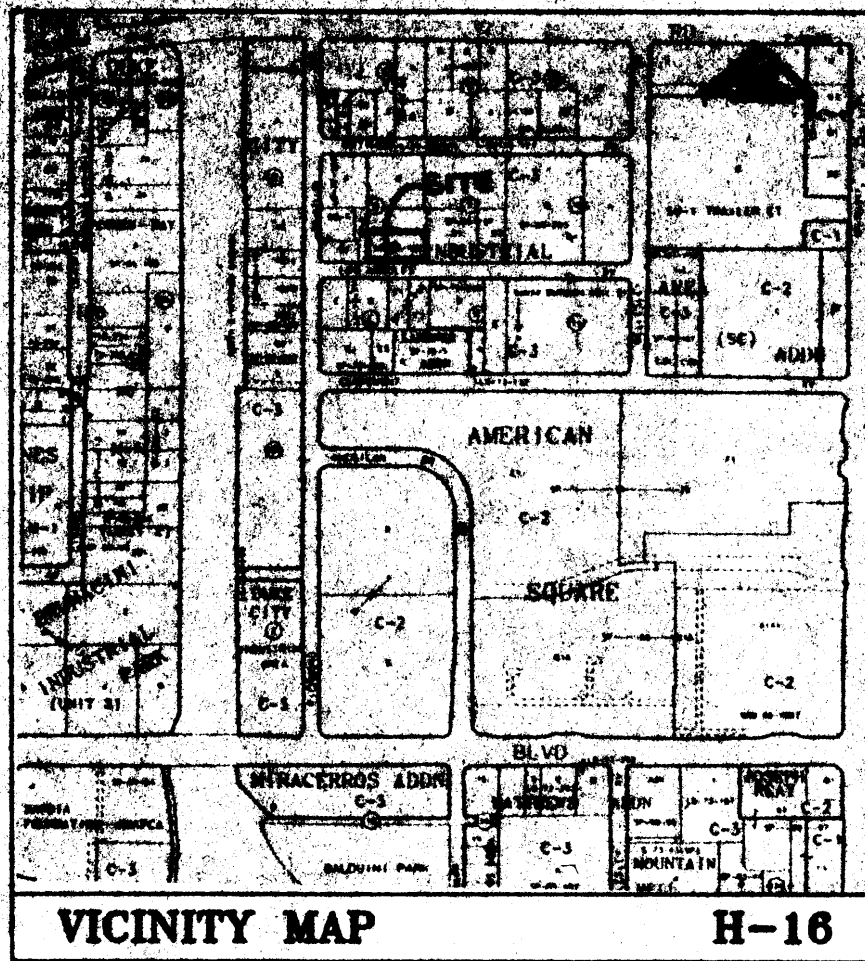
THIS PROJECT WAS CONSTRUCTED IN  
SUBSTANTIAL COMPLIANCE WITH THE  
APPROVED DRAINAGE PLAN.  
1-19-99



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Associates, Inc.  
5512 Horizon Drive NE • Albuquerque, NM 87111  
(505) 298-4651

1  
SHEET NO.





**VICINITY MAP**  
SCALE 1" = 700'

**ADDRESS**

3120 RICHMOND DRIVE NE

**LEGAL DESCRIPTION**

TRACT C, BLOCK D, DUKE CITY INDUSTRIAL ADDN

**BENCHMARK**

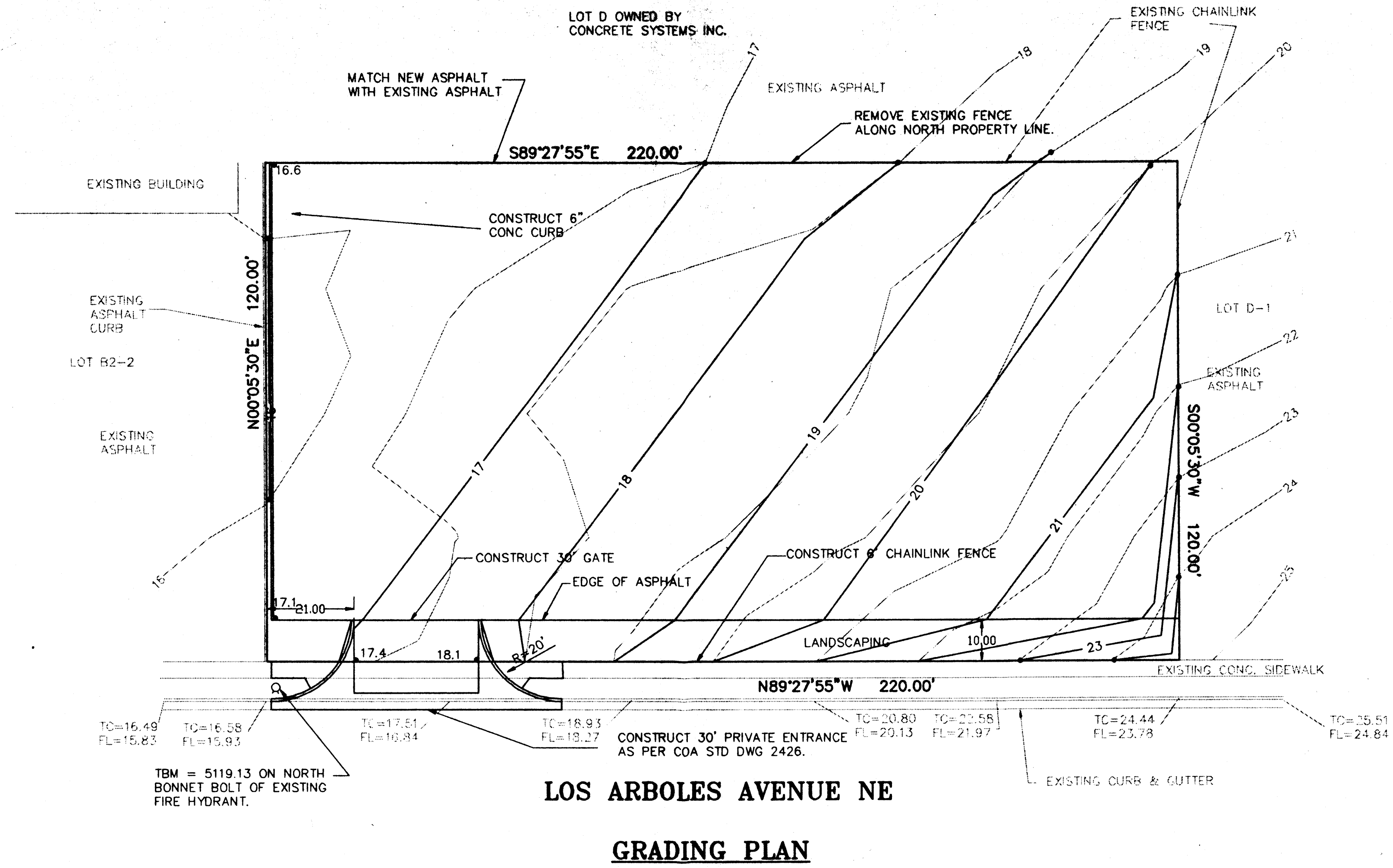
ACS BENCHMARK 1-G16, LOCATED 1000' EAST OF THE INTERSECTION OF RICHMOND AND CANDELARIA ON THE SOUTH SIDE OF THE STREET. ELEVATION = 5119.15

**LEGEND**

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- 36.20 NEW SPOT ELEVATION
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- 35 NEW CONTOUR
- SWALE
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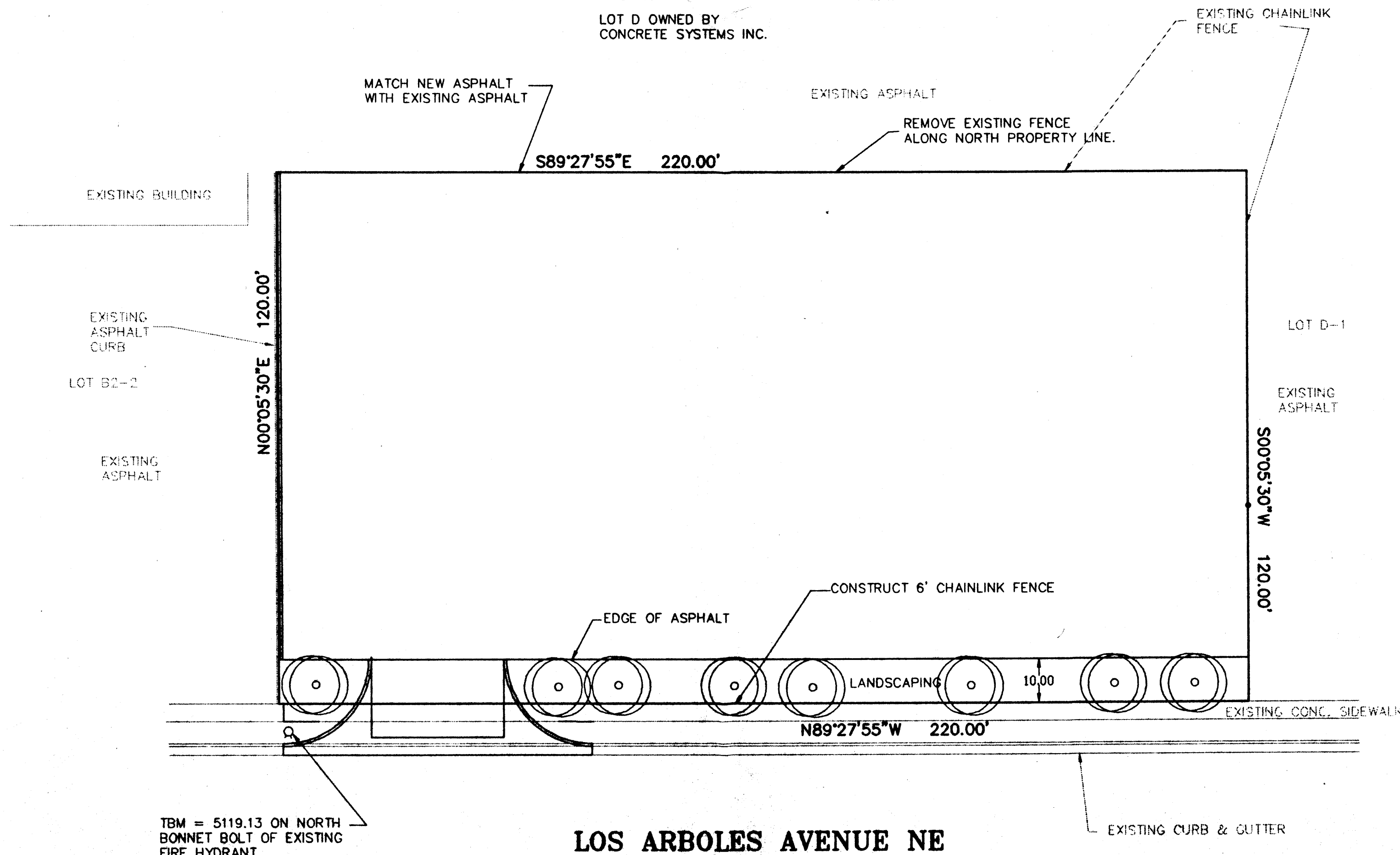
**LANDSCAPING LEGEND**

- 2" CALIPER MODESTO ASH
- GROUND COVER - RUG JUNIPER & RIVER RUN ROCK
- IRRIGATION - BY HAND FROM HOSE BIB.
- MAINTENANCE - BY OWNER.



LOS ARBOLES AVENUE NE

**GRADING PLAN**



LOS ARBOLES AVENUE NE

**LANDSCAPING PLAN**

**GRADING AND DRAINAGE PLAN  
FOR  
CONCRETE SYSTEMS INC.**

**DRAINAGE PLAN**

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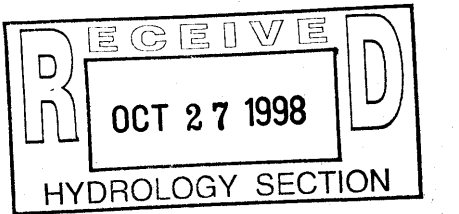
1. VICINITY MAP
2. GRADING PLAN
3. CALCULATIONS

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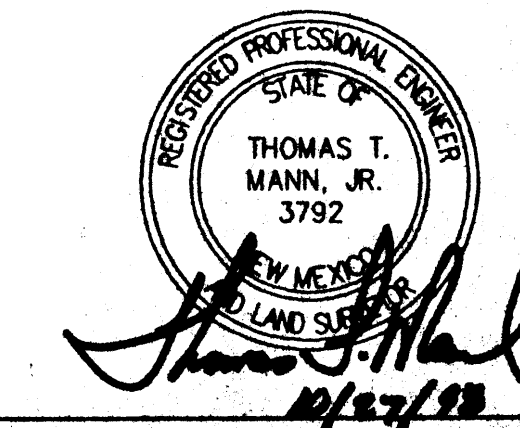
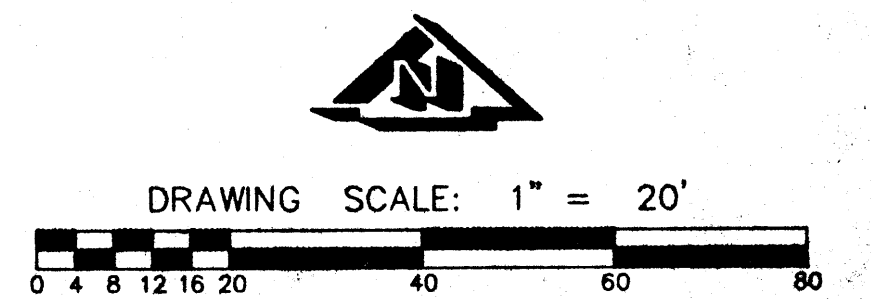
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V = 1.13\*0.61/12 = 0.06 ACRE FEET  
Q = 3.14\*1.00\*0.61 = 1.92 CFS  
DEVELOPED CONDITIONS  
LAND TREATMENT B=13% D=87%  
E = 0.78\*0.13+2.12\*0.87 = 1.95 INCHES  
V = 1.95\*0.61/12 = 0.10 ACRE FEET  
Q = (2.28\*0.13+4.70\*0.87)\*0.61 = 2.68 CFS  
INCREASE IN VOLUME OF RUNOFF = 0.10-0.06 = 0.04 ACRE FEET  
INCREASE IN RATE OF RUNOFF = 2.68-1.92 = 0.76 CFS

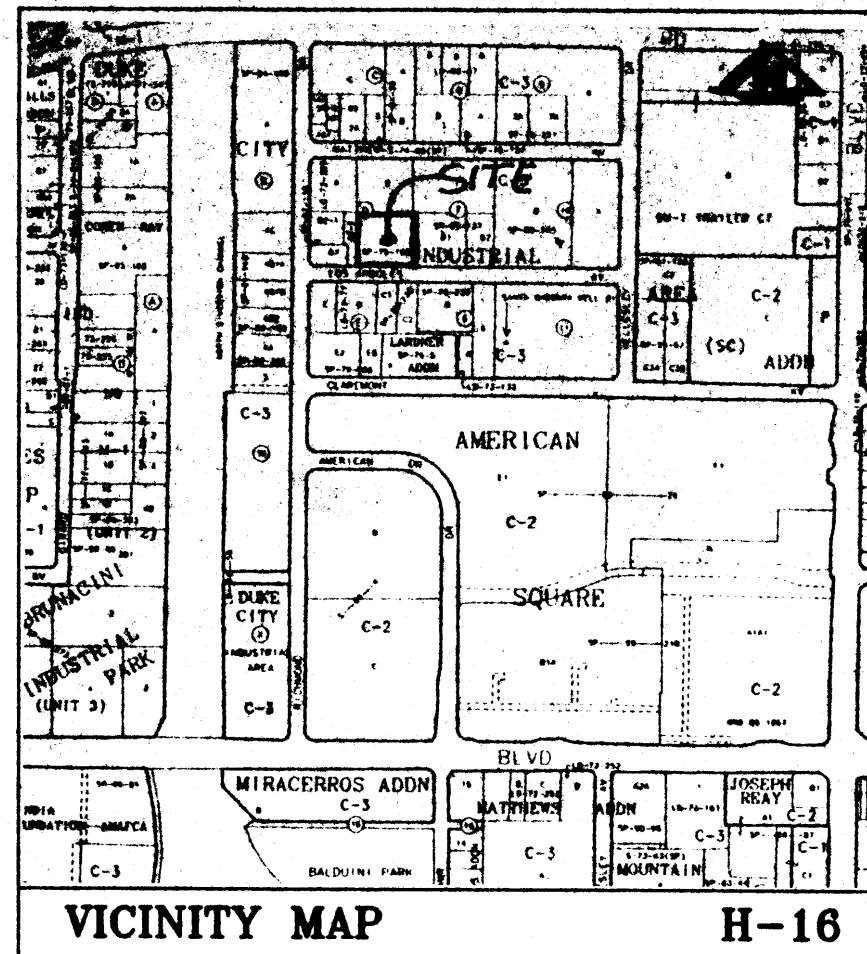


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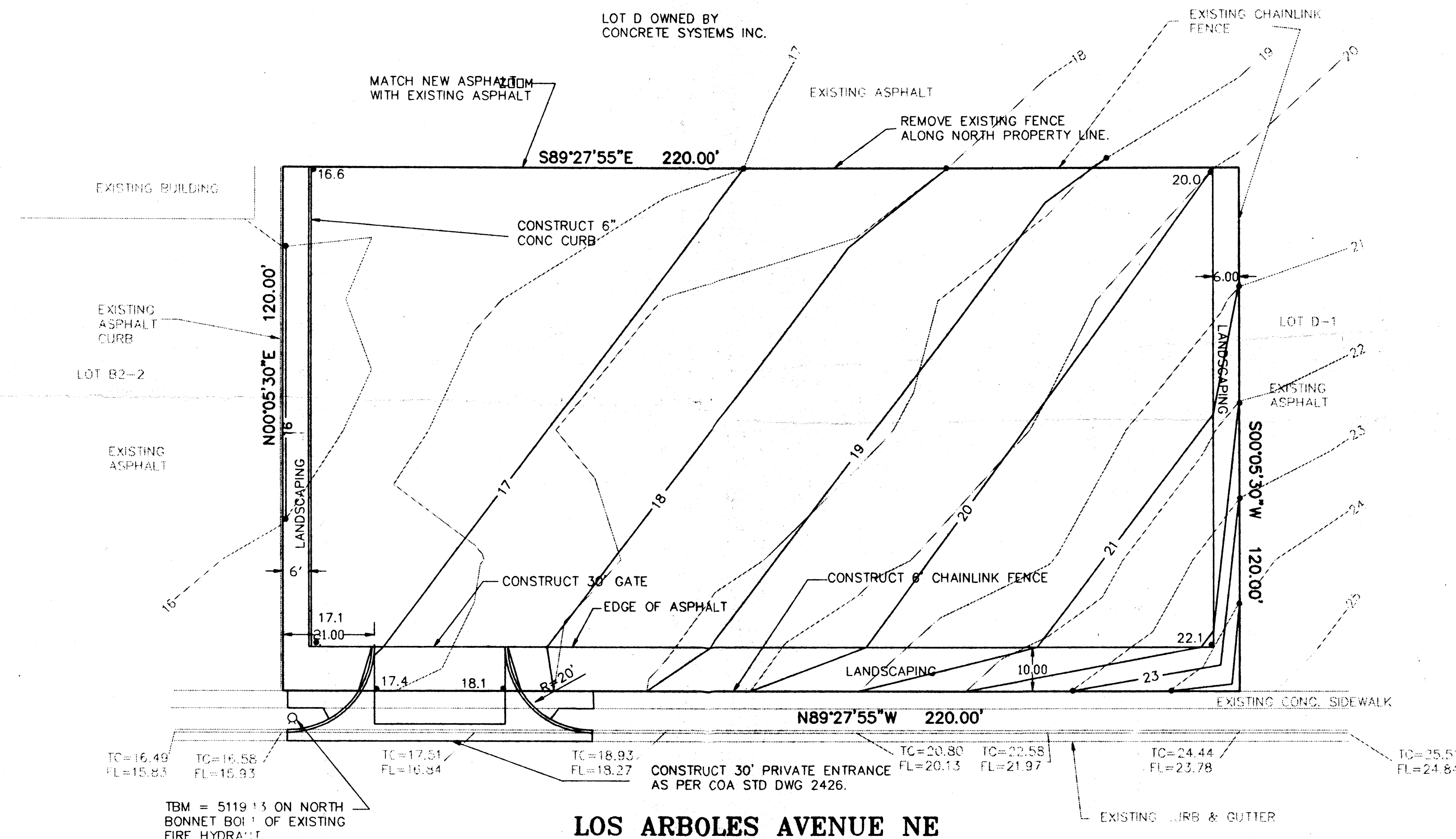
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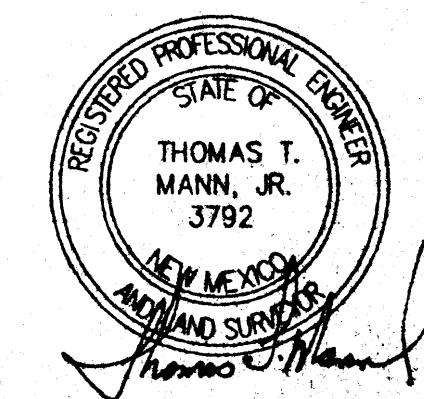
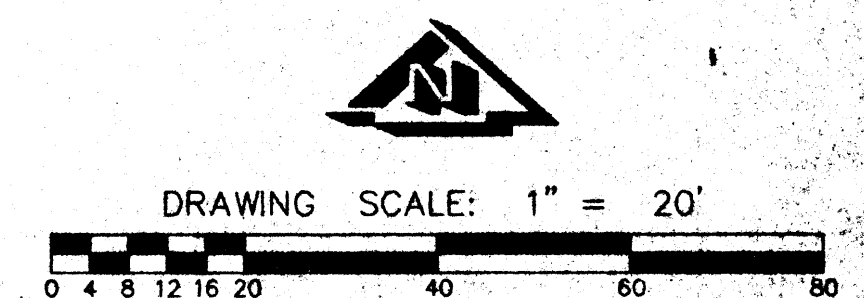
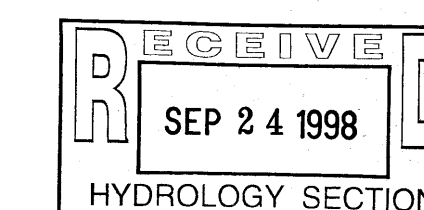
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