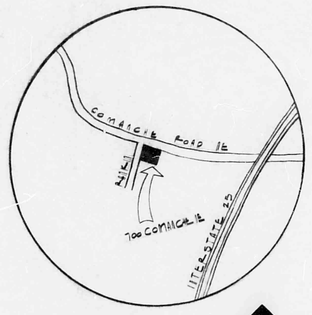
HYDROLOGY

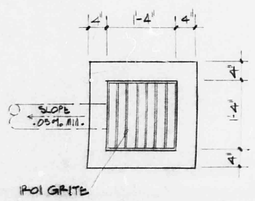
G15/D6
TWO PLANS

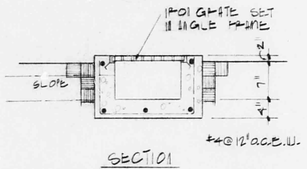
G15-D6

2 PLANS



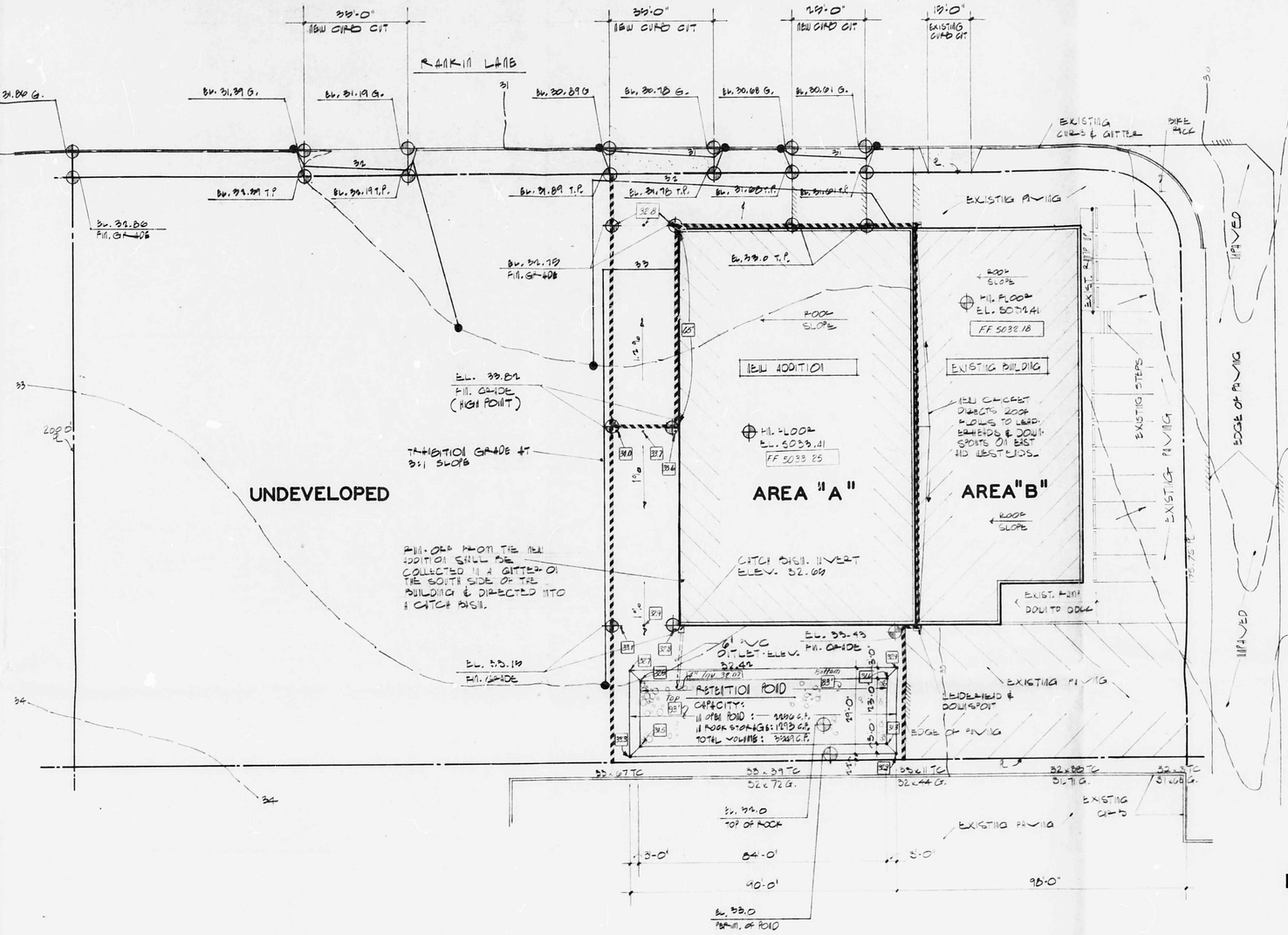
VICINITY MAP
NO SCALE
ZONE ATLAS MAP No G-15





SECTION

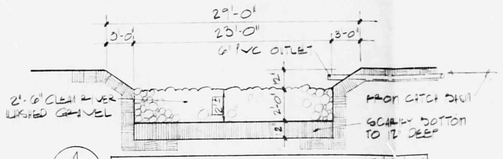
C/2 CATCH BASIN - DETAIL 3/4"=1'-0"



SYMBOL LEGEND

— — — —	EXISTING CONTOUR
34	PROPOSED CONTOUR
33.07	EXISTING SPOT ELEV. 33.07 AT ⊥
⊕	PROPOSED SPOT ELEV.
⊕	BENCHMARK
→	DIRECTION OF FLOW
PL	PROPERTY LINE
T.C.	TOP OF CURB
G.	GUTTER
T.P.	TOP OF PAVEMENT
33.3	AS BUILTS DATA

GRADING & DRAINAGE PLAN SCALE: 1"=20'0"



4/2 POND DETAIL VERT. 1"=1'-0" HORIZ. 1"=1'-0"

APPROVED FOR DRAINAGE
2-4-81
DATE
SIGNATURE
ADVISE DRAINAGE INSPECTOR WHEN GRADING EXECUTED

STATE OF NEW MEXICO
ken hovey
Kenneth Hovey
1055
REGISTERED ARCHITECT

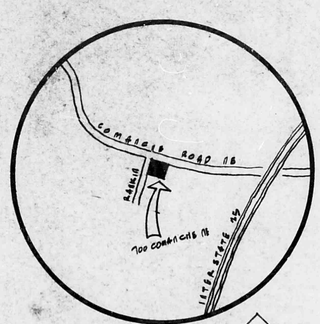
hovey design group
3700 SAN MIS AVE. S.E. ALBUQUERQUE, N.M. MEXICO 87108 • (505) 255-4756

WAREHOUSE ADDITION TO 700 COMANCHE NE

PROJECT #810
DATE JAN. 5, 1981
DRAWN HOVEY
CHECKED
REVISIONS

2

G15/D6



VICINITY MAP
NO SCALE
ZONE ATLAS MAP NO G-15

DRAINAGE CALCULATIONS :

LOCATION AND LEGAL DESCRIPTION :

THE CONTRACT PROPERTY IS LOCATED ON THE SOUTHEAST CORNER OF COMANCHE ROAD AND RAMKIN LANE NE AND IS 0.57AC ± LARGE IN AREA. THIS LOT IS MORE PARTICULARLY DESCRIBED AS LOT 6 OF BLOCK 1 OF THE CONTI INDUSTRIAL DISTRICT, ALBUQUERQUE, N.M.

PROPOSED DEVELOPMENT AND DRAINAGE PLANS:

A NEW 10,800 SQ.FT. ADDITION WILL BE MADE TO THE EXISTING 7193 SQ. FT. BUILDING. NO ADDITIONAL PAVING WILL BE REQUIRED FOR THE NEW BUILDING. THERE IS NO EXISTING POND. RUNOFF FROM THE EXISTING PAVED AREA DRAINS TO RAMKIN LANE AND COMANCHE RD. ALL RUNOFF GENERATED BY THE NEW ADDITION SHALL BE DIRECTED TO A POND ON THE EAST SIDE OF THE BUILDING. THE NET DIFFERENCE IN FLOWS PERMITTED TO LEAVE THE SITE AFTER DEVELOPMENT SHALL BE LESS THAN BEFORE DEVELOPMENT.

SOILS SURVEY :

GILA COMPLEX - GILA SERIES SOIL - DEEP, WELL DRAINED ALLUVIUM, 10 PERCENT GRAVEL, SURFACE LAYER 10 PERCENT SANDY LOAM AND 10 PERCENT SANDY CLAY LOAM, MODERATELY SLOW.

METHOD:

THE AMOUNT OF STORM WATER IS CALCULATED USING A 50 YEAR SIX-HOUR PRECIPITATION FACTOR OF 2.2 INCHES.

THE VOLUME OF FLOW IS CALCULATED USING A RUNOFF FACTOR OF 0.3.

OFFSITE FLOWS:

THERE ARE NO OFFSITE FLOWS.

ONSITE FLOWS:

THE CONTRACT SITE AREA IS 37,900 SQ.FT.

RUNOFF BEFORE NEW ADDITION:

PERVIOUS SURFACE : $\frac{2.2}{12}$ x 19453 x 0.3 = 1070 CU.FT.
IMPERVIOUS SURFACE : $\frac{2.2}{12}$ x 18613 x 0.9 = 3053 CU.FT.
TOTAL VOLUME : 4123 CU.FT.

RUNOFF AFTER NEW ADDITION:

AREA "A":

PERVIOUS SURFACE : $\frac{2.2}{12}$ x 7393 x 0.3 = 407 CU.FT.
IMPERVIOUS SURFACE : $\frac{2.2}{12}$ x 10,800 x 0.9 = 1782 CU.FT.
TOTAL VOLUME : 2189 CU.FT.
TOTAL VOLUME TO BE DIRECTED TO POND : 2189 CU.FT.

AREA "B":

PERVIOUS SURFACE : $\frac{2.2}{12}$ x 3122 x 0.3 = 172 CU.FT.
IMPERVIOUS SURFACE : $\frac{2.2}{12}$ x 17971 x 0.9 = 2965 CU.FT.
TOTAL VOLUME : 3137 CU.FT.
TOTAL VOLUME TO BE DIRECTED TO RAMKIN LANE AND COMANCHE ROAD : 3137 CU.FT.

POND VOLUME :

3' x 3' x 12 INCHES DEEP x 0.33 = 3 CU.FT.
107' x 60' x 12 INCHES DEEP x 0.33 = 2121 CU.FT.
84 x 23 x 12 INCHES DEEP = 1932 CU.FT.
TOTAL VOLUME : 4060 CU.FT.

CRITERIA : HOLD 2 YEAR, SIX HOUR STORM IN POND, USE 1.3".

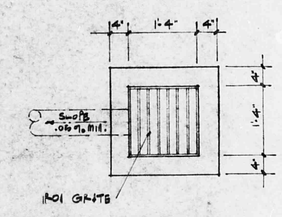
COMPUTATIONS:

PERVIOUS SURFACE : $\frac{1.3}{12}$ x 7393 x 0.3 = 240 CU.FT.
IMPERVIOUS SURFACE : $\frac{1.3}{12}$ x 10,800 x 0.9 = 1053 CU.FT.
TOTAL VOLUME : 1293 CU.FT.

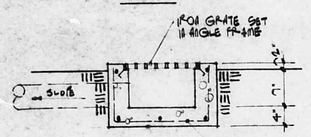
USE VOID RATIO OF 1/3, VOLUME REQ. = 1293 x 3 = 3879 CU.FT

POND DIMENSIONS : 84 x 23

DEPTH OF ROCK : $\frac{3879}{84 \times 23}$ = 2 FEET DEEP

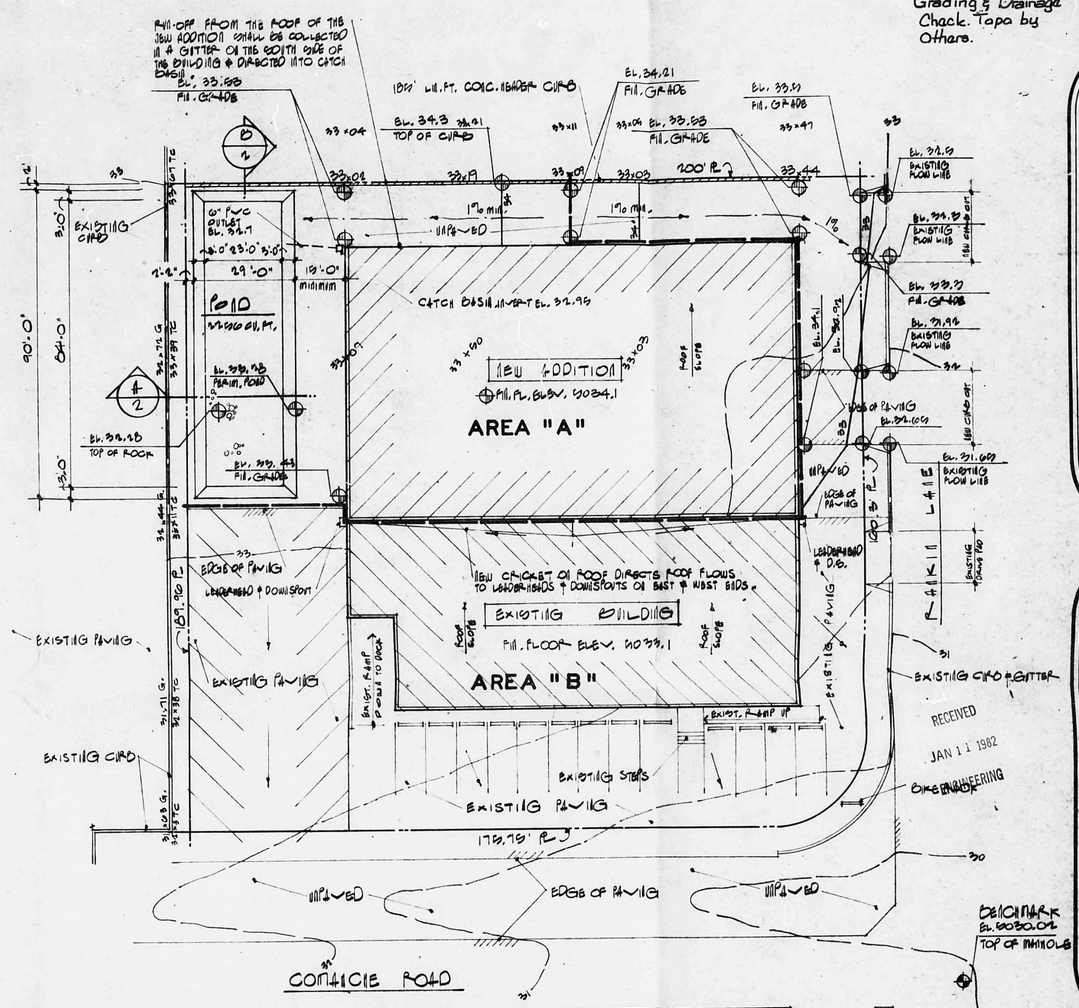


PLAN



SECTION

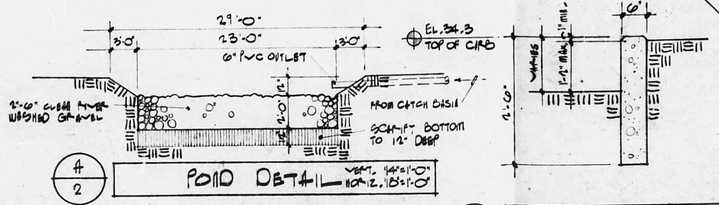
C/2 CATCH BASIN DETAIL 3/4"=1'-0"



GRADING & DRAINAGE PLAN SCALE: 1"=20.0'

SYMBOL LEGEND

- EXISTING CONTOUR
- 34 PROPOSED CONTOUR
- 33x07 EXISTING SPOT ELEV. 33.07 AT "x"
- PROPOSED SPOT ELEV.
- BENCHMARK
- DIRECTION OF FLOW
- PROPERTY LINE
- T.C. TOP OF CURB
- G. GUTTER



4/2 POND DETAIL VERT. 1/4"=1'-0" HORIZ. 1/8"=1'-0"

B/2 HEADER CURB DTL. 3/4"=1'-0"

BRIAN :

THIS IS THE PREVIOUSLY APPROVED PLAN & IS SUBMITTED FOR REFERENCE.

G15/D6

Grading & Drainage Check. Topo by Others.

STATE OF NEW MEXICO
ken hovey
no. 1055
REGISTERED ARCHITECT

KEN HOVEY DESIGN GROUP
2700 SAVING AVE. S.E. ALBUQUERQUE, NEW MEXICO 87106 (505) 255-4798

WAREHOUSE ADDITION TO 700 COMANCHE NE

PROJECT: 8110
DATE: 10 JULY '81
DRAWN: HOVEY
CHECKED:
REVISIONS: 4 SEPT. '81

2