HYDROLOGY K20/D20 HOLIDAY WORLD

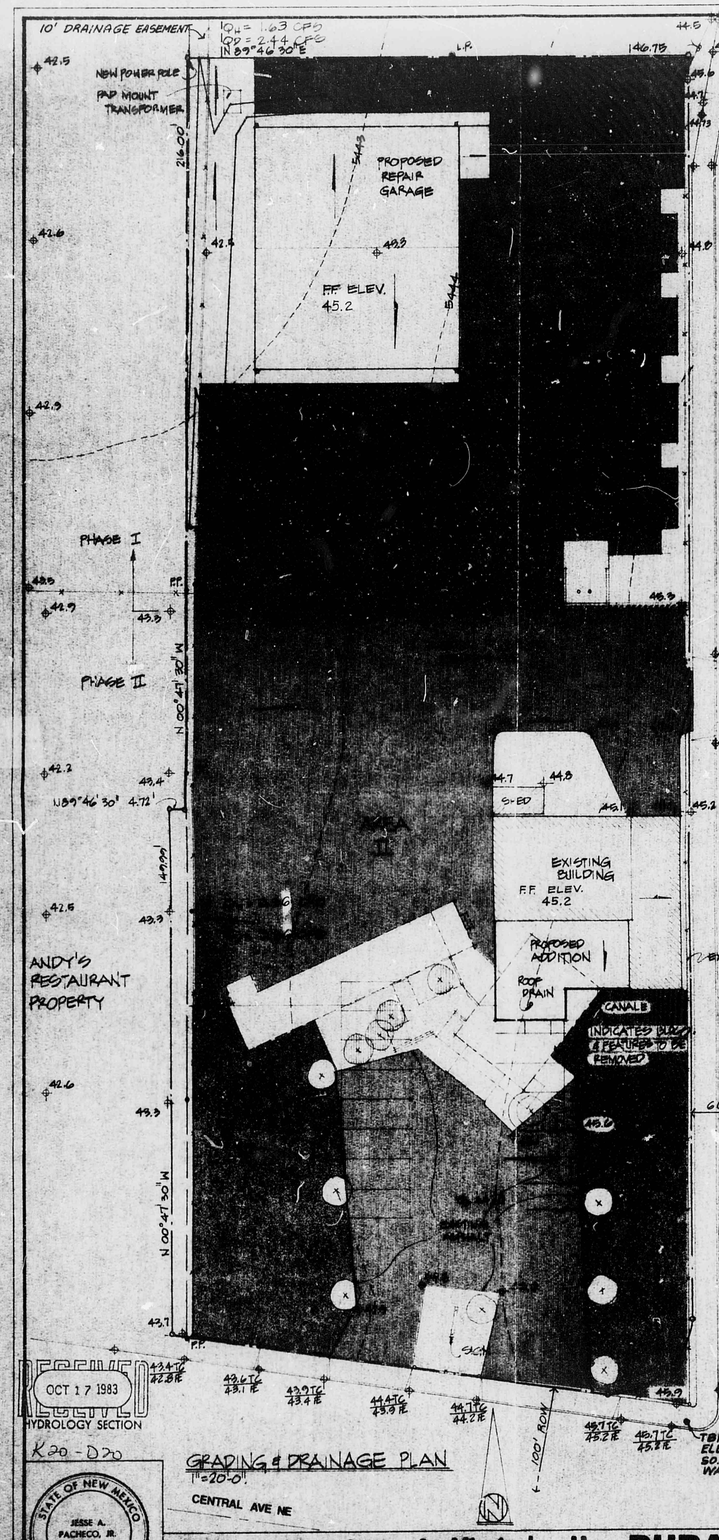
9999 CENTRAL N.E.

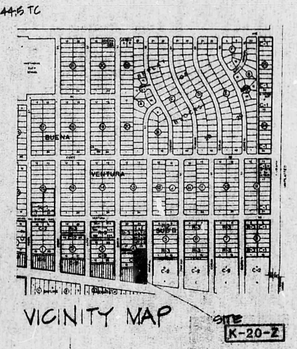
K20 / D20

HOLIDAY WORLD

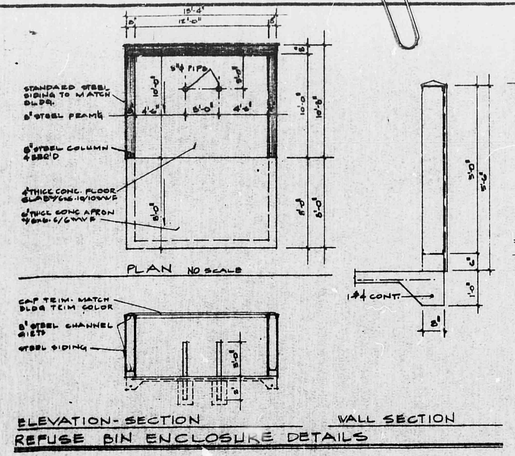
9999 CENTRAL N.E.

1 PLAN

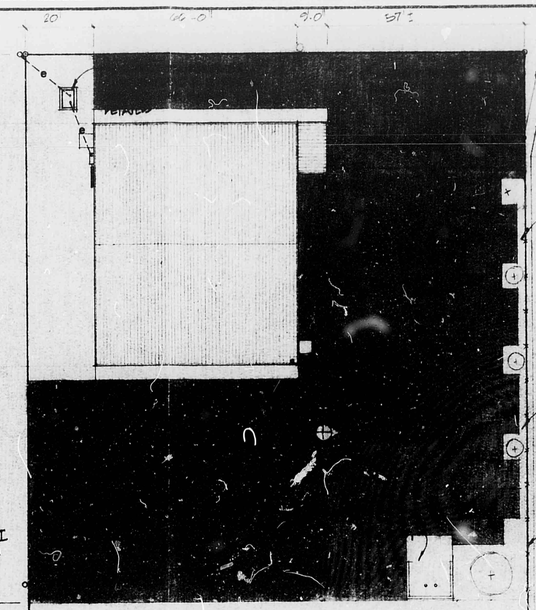



VICINITY MAP




REFUSE BIN ENCLOSURE DETAILS




The project site is located at the northeast corner of Central NE and Parsifal NE. The present use of the property is for mobile home and travel trailer sales.

For simplicity of discussion, I have divided the project into two areas. Area I (south 220 feet) of the project is completely developed with existing buildings, asphalt and highly compacted gravel surfaces. It is the intent of the developer to remove two of the existing buildings and add an additional wing to the remaining existing building. Redevelopment of this area will not increase storm runoff from the site.

Area II (north 160 feet) of the project has been used in the past for mobile home storage. Consequently, this area is moderately to heavily compacted gravel surface. Over the years, the semi trucks which haul in the mobile homes, have compacted this area fairly well.

I have estimated the coefficients of runoff for these two areas to be:

Area I C = 0.90 (32,120 Ft²)

Area II C = 0.60 (23,360 Ft²)

No offsite flows enter the site. The existing runoff flows from north to south onto the adjoining properties. It is the intent that further development of this property will not increase runoff within Area I and the increase of runoff in Area II will be minimal (0.04 cfs).

The runoff from Area I will be intercepted in a swale along the west property line and diverted toward the 10' drainage easement of the northside adjoining property in which recorded plat is still in progress. This runoff will flow north and discharge into Buena Ventura Street N.E.

The runoff from Area II presently flows into the westside adjoining property and discharges into Central Ave. N.E. As stated the increase of runoff is minimal.

HISTORIC CONDITIONS

Area I Coefficient of runoff = 0.90 (entire area is asphalt and highly compacted gravel surface.)

Area II Coefficient of runoff = 0.60 (moderate to highly compacted gravel surface)

Area I . A = 23,360 Ft²

Area II . A = 32,120 Ft²

$C = \frac{(0.90)(32120) + (0.60)(23360)}{55480} = 0.77$

Developed Conditions

$C = \frac{(0.90)(32,480)}{55,480} + 0.90$

$T_c$ = 10 min.

1 - 6.84 to -0.51 = 2.11

6 Hr. Values = 2.4"

I = (2.11)(2.4) = 5.06

$Q_H$ = CIA = (0.77)(5.06)(55,480) = 4.93 cfs / 43,560

$Q_D$ = (0.90)(5.06)(55,480) = 5.77 cfs / 43,560

AREA I

$Q_H = \frac{23,360 \times 5.06 \times .60}{43560} = 1.63$ CFS

$Q_D = \frac{23,360 \times 5.06 \times .90}{43560} = 2.44$ CFS

AREA II

$Q_H = Q_D \frac{32,120 \times 5.06 \times .60}{43560} = 1.20$ CFS

JAMES E. BLACKWELL NEW MEXICO 7145 REGISTERED PROFESSIONAL ENGINEER
10-6-83

## LEGAL DESCRIPTION

9999 CENTRAL AVE. N.E.
TRACT "A" LANDS OF HOLIDAY WORLD

## PERMIT DATA

ZONING : C-2, K-20-E
OCCUPANCY : H-4 NEW SERVICE BLDG, B-2 EXISTING & ADDITION
TYPE OF CONSTRUCTION : II-N SERVICE BLDG., II-N EXISTING & ADD'N.
BUILDING AREA : 4,336 ± NEW SERVICE, 1947 ± EXISTING, 786 ± ADD.
SEISMIC ZONE : II

## PARKING REQUIREMENTS

| | |
|---|---|
| EXISTING BUILDING | 1947 |
| NEW SERVICE BUILDING | 4336 |
| OFFICE ADDITION | 786 |

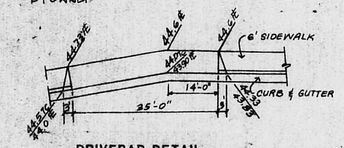
7068 ± ÷ 200 × .9 = 32 SPACES REQUIRED

PROVIDED : 6 WORKING BAYS
8 SMALL CARS
17 FULL-SIZED
1 HANDICAPPED

## LANDSCAPE LEGEND

PONDEROSA PINE RELOCATED EXISTING BY OWNER

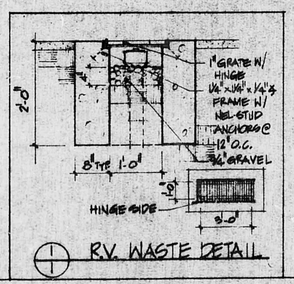
RELOCATED EXISTING SHRUBS - BY OWNER




DRIVEPAD DETAIL

## SYMBOL LEGEND

- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- EXISTING CONTOUR
- PROPERTY LINE
- PROPOSED CONTOUR
- AREA BOUNDARY
- EXISTING FENCE
- EXISTING TREE
- REMOVE & RELOCATE
- POWER LINE & POLE
- EXISTING PAVING & COMPACTED GRAVEL




R.V. WASTE DETAIL

RECEIVED OCT 17 1983 HYDROLOGY SECTION

K20 - D20

GRADING & DRAINAGE PLAN
1"=20'-0"

SITE PLAN
1"=20'-0"

K20 / D20

STATE OF NEW MEXICO JESSE A. PACHECO, JR. No. 260 REGISTERED ARCHITECT

Pacheco Group Architects Las Cruces

DURA BILT PRODUCTS, INC.
GENERAL CONTRACTORS LICENSE NO. 3044
4808 JEFFERSON NE PH 883-9100 ALBUQUERQUE NM 87109

REPAIR GARAGE
HOLIDAY WORLD
9999 CENTRAL NE

83-50-01

DATE: 5 AUG 83
JOB NO: 83-124

SHEET NO: 1 OF 4