HYDROLOGY

K13/D3A

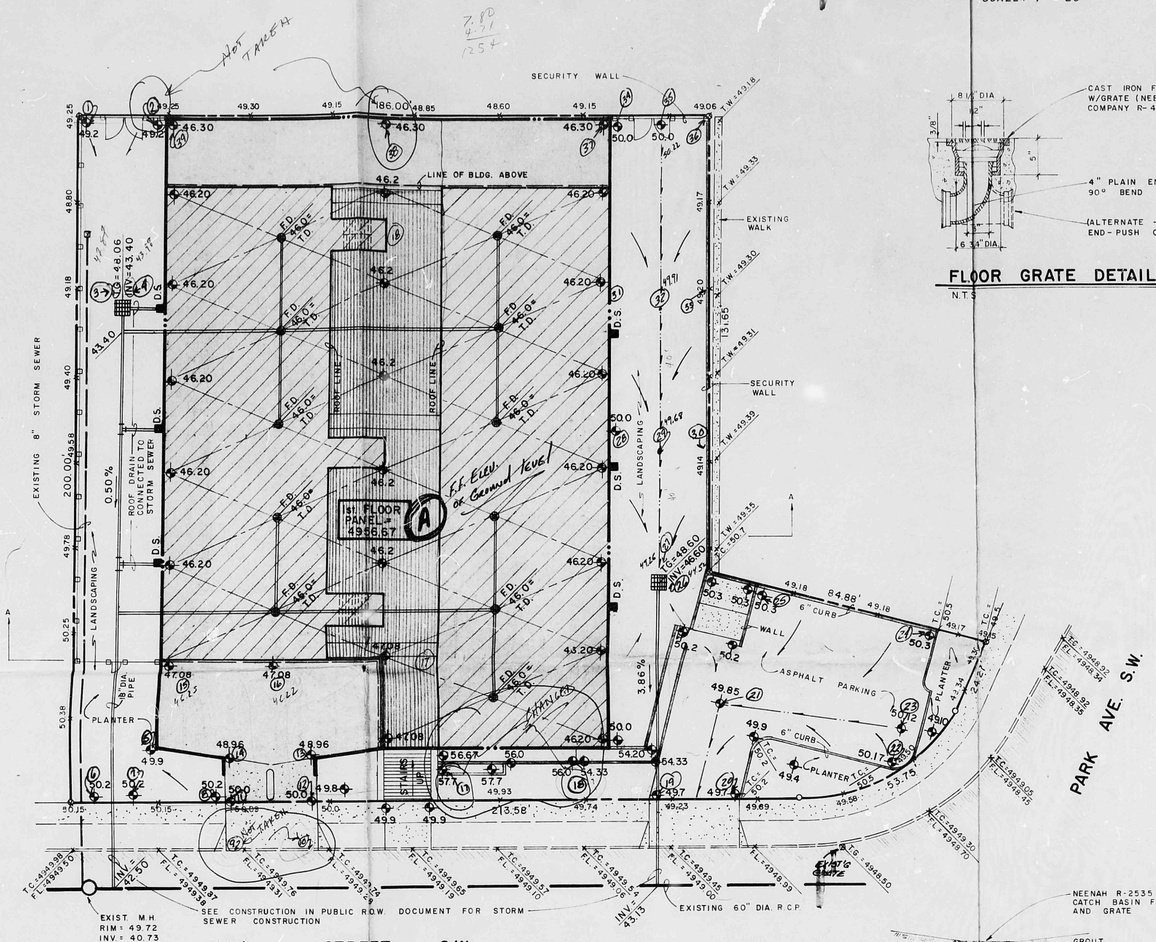
ONE PLAN

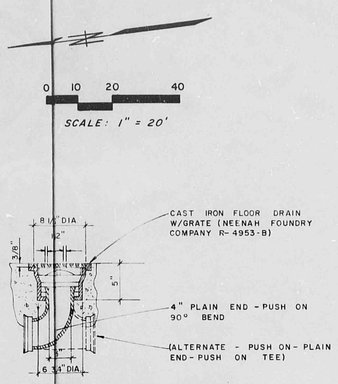
1 PLAN FOR

PARK PLACE APTS.

K 13- D3A

Survey Book A-2



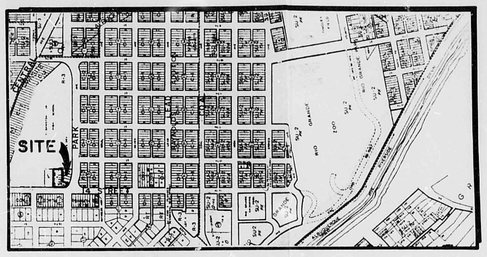


FLOOR GRATE DETAIL

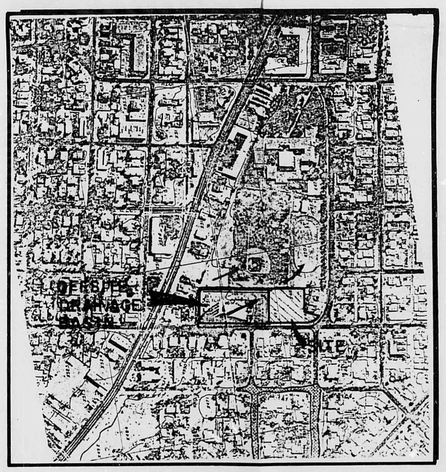
N.T.S.

LEGEND

- ASPHALT PAVING (UNDERGROUND PARKING)
- LANDSCAPED AREA
- PROPERTY LINE
- EXISTING CURB & GUTTER W/SIDEWALK
- 12.7 EXISTING SPOT ELEVATION
- 12 EXISTING CONTOUR
- 12.7 PROPOSED SPOT ELEVATION
- 12 PROPOSED FINISHED CONTOUR
- SURFACE FLOW DIRECTION
- BUILDING STRUCTURE
- COURTYARD AREA
- D.S. DOWNSPOUT W/SPLASH PAD

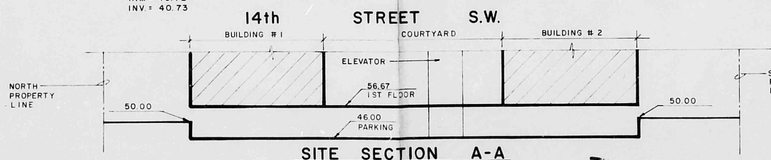


VICINITY MAP - K-13



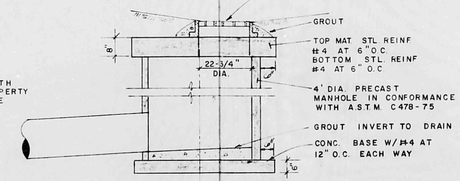
FLOOD HAZARD MAP

File K13-D3a
Survey Book
Hydrology A-2
Page 55 thru
Requested 11-27-89



SITE SECTION A-A

(PROJECTED FROM PLAN ABOVE AT 1" = 20')



GRATE DETAIL

N.T.S.

RECEIVED
NOV 29 1983
ENGINEERING

DRAINAGE AND GENERAL NOTES

1. LEGAL DESCRIPTION: Lots 2-A, and Lot 3-A of the Park Avenue Townhouses
2. ZONING: SU-1
3. THIS DRAINAGE AND GRADING PLAN WAS PREPARED BY ANDRE HOULE NMPE 7876, on 11-11-83.
4. FLOOD HAZARD AREA: This site is designated to be in Flood Hazard Zone C on plat 350002-0028 FEMA FHBM dated September 15, 1983.
5. SOIL DATA: The USDA soil survey of Bernalillo County, identifies this soil to be silty clay loam of hydrologic soil group B.
6. UNDEVELOPED DRAINAGE CHARACTERISTICS: The site comprises of 0.95 acres of undeveloped area. The rainfall amount is 2.3" based upon plate 22.2D1, the ten minute intensity (I) is 2.11 (2.3)= 4.9 inches/hour. The "C" factor equals 0.34 from plate 22.2 Q1=Q100=CIA= (0.34)(4.9)(.95)= 1.6 c.f.s. This flow originally drained to the south east but recent construction of the Washington School site has blocked these flows.
7. OFFSITE FLOWS: The site intercepts all the flows from the Park Plaza Condominum site. There is a storm sewer grate with an 8" storm sewer outfalling to the 60" storm sewer on 14th street. The entire site of Park Plaza Condominums is, approximately 0.6 acres, hence the flows to the storm sewer is Q=CIA=(1.0)(4.9)(.55)=2.7 c.f.s. The invert to this 8" pipe is 1.2 feet hence the capacity if only 1.9 c.f.s. so some ponding results on this site. The flows from the west are intercepted by a north-south driveway with curb which flows to the south. Any flows from the east are confined to a 20' wide strip of landscaped area which is covered with mulch and runoff should be minimal and self contained as per the original drainage patterns.
8. BENCH MARK: City of Albuquerque benchmark 3-M13 located at 12th Street and Stover Elevation 4945.01
9. DEVELOPED DRAINAGE MANAGEMENT PLAN: The basement, the north building and the north yard will drain to an underground stormsewer which will outfall to the existing storm sewer on 14th street. The total flow to the storm sewer is calculated as follows:

C= 1.0

Q= (0.53)(1.0)(4.9)= 2.6 c.f.s. onsite plus 2.7 (minus the 1.9 c.f.s. of the existing 8" s.s.) is 3.4 c.f.s., therefore use a 18" dia. P.V.C. pipe @ slope = 0.004 n= 0.012 Qfull= 7.2 c.f.s. Inlet capacity $=CA\sqrt{2gh}$ = 48.7 - 45.0 = 3.7 Q= 16.4 c.f.s., therefore capacity is 7.2 c.f.s.

The balance of the building plus the side yard will drain to another grate. The flow thru this grate is from 14200 sq. ft. (0.33 acres) Q= CIA= (1.0)(4.9)(3.3)= 1.60 c.f.s. Use an 8" dia. pipe which at a slope of 3.85% has a capacity of 2.6 c.f.s.

The parking lot will drain to 14th street and to a grate which will outfall to the 60" dia. R.C.P.

Approved 11-30-89

K13/D3a

Sheet Title: SITE DRAINAGE PLAN & DETAILS

PARK PLACE

Job no :
Date : NOV 29 1983
Drawn :
Check :
Rev :

NORTON & ASSOCIATES ARCHITECTS
1717 Louisiana Blvd NE Albuquerque New Mexico 87110 Tel (505) 265-8333

Sheet of