GRADING AND DRAINAGE PLAN

FOR

The North Fifty (50) feet of the West Seventeen (17) feet of Lot numbered Nineteen (19) and the North Fifty (50) feet of Lots numbered Twenty (20), Twenty-one (21), Twenty-two (22), Twenty-three (23) and Twenty four (24) in Block numbered Five (5) of the ROMERO ADDITION.

VICINITY MAP | J-14-Z

SCALE 1" = 20'

RIGHT-OF-WAY

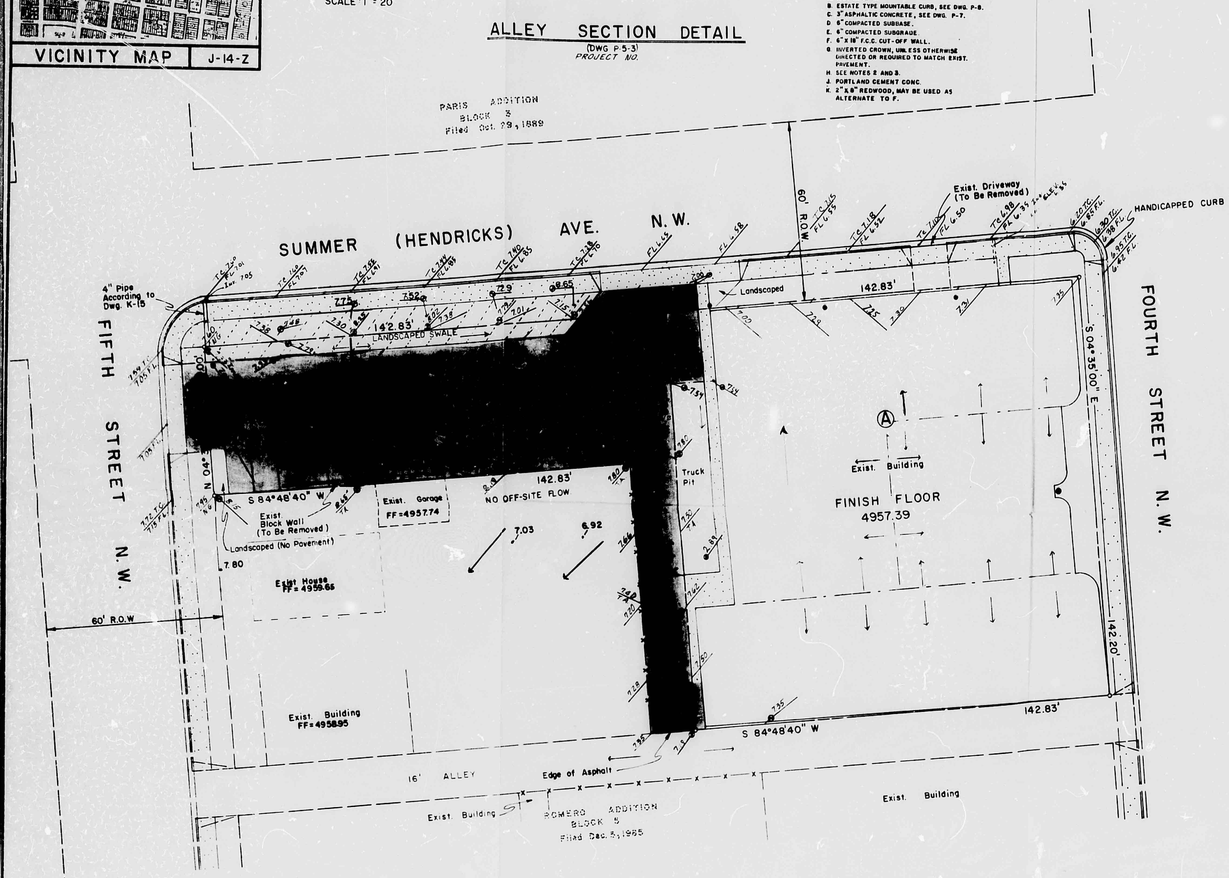
ALLEY SECTION DETAIL

(DWG P 5.3)
PROJECT NO.

1. ESTATE TYPES STREET SECTION TO BE USED ONLY WHEN REQUIRED BY DRAINAGE CONSIDERATION.
2. FOR HEAVY COMMERCIAL OR INDUSTRIAL ALLEYS, USE ARTERIAL PAVING, SEE DWG. P-4.
3. FOR RESIDENTIAL OR LIGHT COMMERCIAL ALLEYS, USE RESIDENTIAL-PAVING, SEE DWG P-2
4. R.O.W. REQUIREMENTS TO BE ESTABLISHED ACCORDING TO THE SUBDIVISION ORDINANCE. DESIGN OF SIDEWALKS CONFIGURATION AND DRAINAGE FACILITIES, AND APPURTENANCE LOCATION SHALL BE ON AN INDIVIDUAL SITE SPECIFIC BASIS. DETAILS FOR SIDEWALKS CONFIGURATION, APPURTENANCE LOCATION, DITCHES, AND OTHER DRAINAGES FACILITIES SHALL BE AS SHOWN ON THE SPECIFIC CONSTRUCTION PLANS.
5. FOR PAVING SECTIONS, SEE DWG. P-7.

CONSTRUCTION NOTES:

A. SEE NOTE 4.
B. ESTATE TYPE MOUNTABLE CURB, SEE DWG. P-8.
C. 3" ASPHALTIC CONCRETE, SEE DWG. P-7.
D. 6" COMPACTED SUBBASE.
E. 6" COMPACTED SUBGRADE
F. 6" X 18" F.C.C. CUT-OFF WALL.
G. INVERTED CROWN, UNLESS OTHERWISE DIRECTED OR REQUIRED TO MATCH EXIST. PAVEMENT.
H. SEE NOTES E AND B.
J. PORTLAND CEMENT CONC.
K. 2" X 6" REDWOOD, MAY BE USED AS ALTERNATE TO F.



BENCHMARK INFORMATION

BM 16-J14, INTERSECTION OF 4th STREET AND CONSTITUTION N.W. IN THE N.W. QUADRANT OF THE INTERSECTION. A SQUARE ☒ CHISELED ON TOP OF CONCRETE CURB AT THE N.W. CURB RETURN. ELEVATION 4958.194.

TBM FF ELEVATION 495739

LEGEND

- 4957 — EXISTING CONTOUR LINE
- (57) — PROPOSED CONTOUR LINE
- 7.35 / TC — EXISTING SPOT ELEVATIONS
- @ 8.15 — PROPOSED SPOT ELEVATIONS
- DRAINAGE AREA DIVISION LINE
- FLOW DIRECTION
- TC — TOP OF CURB
- TA — TOP OF ASPHALT
- NG — NATURAL GROUND
- INVERT ELEVATION — INV.
- FL — FLOW LINE
- ● — DOWNSPOUT
- —x—x— EXISTING CHAINLINK FENCE
- PAVED AREAS

DRAINAGE INFORMATION

I. References
   A. City of Albuquerque Development Process Manual (DPM), Volume 2, Design Criteria
   B. Soil Survey of Bernalillo County and Parts of Sandoval and Valencia Counties, New Mexico, U.S. Soil Conservation Service, Sheet
   C. Flood Insurance Rate Map, City of Albuquerque, New Mexico Panel

II. General Information
   A. Site Location and Elevation Data
      1. Legal Description: Block 5 Paris Add'n
      2. Total Site Area: .466 Ac. (Area A) + .164 Ac. (Area B)
      3. City Address:
      4. City Bench Mark: 16-J 14
      5. County Zone Atlas: J-14
   B. Soil Type (Reference B) Glendale Loam
      Hydrologic Soils Group B
   C. 6-hour, 100-year rain, P_{6} = 2.2 inches Reference A, Plate 22.2 B-1
   D. Runoff Coefficient ("C" Factor) Reference , Plate
      Undeveloped "C" Factor, Cur
      Developed "C" Factor, Assume the following values:
         Buildings and concrete surfaces
         Asphalt concrete paving
         Landscaping, same as natural soil

Weighted "C" Factor:

Type of Surface	"C"	Area (SF)	C x A
Concrete	1.0	2,500	2,500
Roof	.98	17,809	17,453
Asphalt	.98	7,141	6,998
		27,450	26,951

Weighted "C" Factor = $\frac{\sum (\text{"C"} \times A)}{\sum A}$ = 26,951/27,450 = 0.982

   E. Time of Concentration - Developed Area
      Watershed length L = 600ft
      Watershed change in elevation h = 1.5ft
      Watershed slope S = h/L = .0025
      by Kirpich equation: $T = .0078\ (L^{0.77}/S^{0.385})$ < 10 minutes
      T_c = 10 minutes minimum T_c=10.8 min
   F. Intensity Reference: , Plate
      $I = B_1 \times 6.84 \times T_c^{-0.51}$
      = 4.47 in/hr
   G. Peak Discharge - Rational Methods
      Developed Conditions

Area A

Q = CIA
C = .982
I = 4.47in/hr
A = .466 Ac
Q = .982(4.47) .466)=2.05cfs

Area B

Q = CIA
C = .982
I = 4.47
A = 926 x 50' = .11Ac
Q = .982(4.47) .11) = .48

Area C

Q = CIA
C = .982
I = 4.47
A = 50 x 50 = .06AC
Q = .982 (4.47 (.06)= .26cfs

Total = 2.79cfs

Existing Condition:

Area A Same the same

Area B

Q = CIA
C = .51 (Dpm 22.2 C-1)
I = 4.47
A = .11Ac
Q = .51(4.47)(.11)=.25cfs

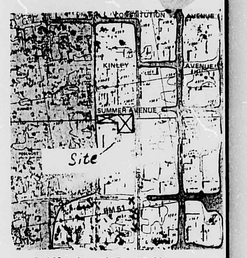
Area C

Q = CIA
C = .51
I = 4.47
A = .06Ac
Q = .51(4.47).06)=.14cfs

Total = 2.05 + .14 = 2.44
ΔQ_{100} = 2.79 - 2.44 = .35cfs

Since .35 cfs for Q_{100} is so minute
no .35(.651)=.22cfs for Q_{10}
Free discharge is recommended.

EROSION CONTROL
NOTE TO CONTRACTOR:
The contractor shall promptly clean up any material excavate within the public right-of-way so that the excavated material is not susceptible to being washed down the street.



FLOOD MAP PANEL NO 28
SITE IS NOT IN A FLOOD ZONE

LEGAL DESCRIPTION
The North Fifty (50) feet of the West Seventeen (17) feet of Lot numbered Nineteen (19) and the North Fifty (50) feet of Lots numbered Twenty (20), Twenty-one (21), Twenty-two (22), Twenty-three (23) and Twenty four (24) in Block numbered Five (5) of the ROMERO ADDITION.

RECEIVED
AUG 14 1985
HYDROLOGY SECTION

June 26, 1985
8-13-85

HALL ENGINEERING COMPANY INC.
337 EUBANK N.E., SUITE 103
ALBUQUERQUE, NEW MEXICO 87123
Phones: (505) 292-1115 & 292-1116

D 24 C 20 B 16 A 12

CITY OF ALBUQUERQUE

C D