



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

September 23, 1991

Frank Lovelady, P.E.
Lovelady & Associates
7408 Morrow, NE
Albuquerque, New Mexico 87110

RE: DRAINAGE PLAN FOR ROTTEK CORPORATION
(C-17/D1A2) ENGINEER'S STAMP DATED SEPTEMBER 11, 1991

Dear Mr. Lovelady:

Based on the information provided on your submittal of September 11, 1991, the above referenced plan is approved for Foundation and Building Permit.

Please attach a copy of this plan to the construction sets prior to sign-off by Hydrology.

If I can be of further assistance, please feel free to call me at 768-2650.

Cordially,

Bernie J. Montoya, C.E.
Engineering Assistant

BJM/bsj
(WP+2869)

PUBLIC WORKS DEPARTMENT

Walter H. Nickerson, Jr., P.E.
Assistant Director Public Works

ENGINEERING GROUP

Telephone (505) 768-2500

AN EQUAL OPPORTUNITY EMPLOYER

DRAINAGE INFORMATION SHEET

PROPOSE BUILDING FOR

PROJECT TITLE: ROTEK CORP. ZONE ATLAS/DRNG. FILE #: C-17/D-1A2LEGAL DESCRIPTION: Lot 31-A TRACT B CLIFFORD INDUSTRIALCITY ADDRESS: 8401 WASHINGTON ST. NEENGINEERING FIRM: Lovelady & Associates CONTACT: Frank LoveladyADDRESS: 7408 Morrow Ave. NE 87110 PHONE: 883-7973OWNER: Rotek CORPORATION CONTACT: JOE SCHLEGALADDRESS: 925 6TH PHONE: 246-0870ARCHITECT: JOE SCHLEGAL CONTACT: JOE SCHLEGALADDRESS: 925 6TH PHONE: 246-0870SURVEYOR: LOVELADY & ASSOC CONTACT: FRANK LOVELADYADDRESS: 7408 MORROW AVE NE PHONE: 883-7973CONTRACTOR: CAMBRO CONST. CONTACT: SAM CAMILLIADDRESS: 7424 2ND NW PHONE: 345-1133

PRE-DESIGN MEETING:

☐ YES

DRB NO. _____

☒ NO

EPC NO. _____

☐ COPY OF CONFERENCE RECAP
SHEET PROVIDED

PROJECT NO. _____

TYPE OF SUBMITTAL:

CHECK TYPE OF APPROVAL SOUGHT:

☐ DRAINAGE REPORT☐ SKETCH PLAT APPROVAL☒ DRAINAGE PLAN☐ PRELIMINARY PLAT APPROVAL☐ CONCEPTUAL GRADING & DRAIN. PLAN☐ SITE DEVELOPMENT PLAN APPROVAL☐ GRADING PLAN☐ FINAL PLAT APPROVAL☐ EROSION CONTROL PLAN☒ BUILDING PERMIT APPROVAL☐ ENGINEER'S CERTIFICATION☒ FOUNDATION PERMIT APPROVAL☐ CERTIFICATE OF OCCUPANCY APPROVAL☐ ROUGH GRADING PERMIT APPROVALDATE SUBMITTED: September 11, 1991☐ GRADING/PAVING PERMIT APPROVALBY: Frank D. Lovelady

OTHER _____ (SPECIFY)

Frank D. Lovelady, P.E.

EXISTING CONDITIONS:

The site is located on the west side of Washington Street NE approximately 0.35 mile north of Paseo Del Norte NE, in Clifford Industrial Park. The site slopes from east to west at an average slope of 2.5%. Adjacent property is fully developed on the south, west, and north. There is a swale in a 15' drainage easement at the rear of the site that carries flow south in accordance with the approved master drainage plan.

DEVELOPED CONDITIONS:

All runoff from the proposed building and parking will be directed to the drainage easement and swale at the rear of the site.

SOIL INFORMATION:

(Refer to "Soil Survey of Bernalillo County", June 1977.) Soil is EmB, Embudo gravelly fine sandy loam, 0 to 5 percent slopes, hydrologic soil group "B".

TIME OF CONCENTRATION:

Use ten (10) minutes, minimum time of concentration.

DRAINAGE CALCULATIONS

RAINFALL, 100-YEAR, 6-HOUR:

(Refer to D.P.M., Plate 22.2 D-1). $R_6 = 2.25$ inches.

RAINFALL INTENSITY:

$I = R_6 \times 6.84 \times T_c^{-0.51} = 2.25 \times 6.84 \times 10^{-0.51} = 4.76$ inches per hour.

SITE IMPERVIOUSNESS:

Surface Type	"C"	"CN"	Direct RUNOFF (IN)	Existing AREA (SF)	Developed AREA (SF)
Building Roof	0.90	98	2.10		11000
Asph. & Conc.	0.95	98	2.10		15770
Landscaping	0.25	61	0.15		2380
Unpaved	0.40	82	0.85	30000	30000
Totals				30000	30000

WEIGHTED "C" VALUE:

Existing: $C = 0.40$

Developed: $C_w = \frac{(0.90 \times 11000 + 0.95 \times 15770 + 0.25 \times 2380 + 0.40 \times 850)}{30000} = 0.86$

PEAK DISCHARGE:

Existing:

$Q = CIA = 0.40 \times 4.76 \times (30000/43560) = 1.31$ cfs

$Q_{10} = 0.657 \times 1.31 = 0.86$ cfs

Developed:

$Q_{100} = CIA = 0.86 \times 4.76 \times 0.6887 = 2.82$ CFS

$Q_{10} = 0.657 \times 2.82 = 1.85$ cfs.

VOLUME, 100-year and 10-Year, 6-hour:

Existing:

$V_{100} = 30000 (0.85 / 12) = 2125$ CF

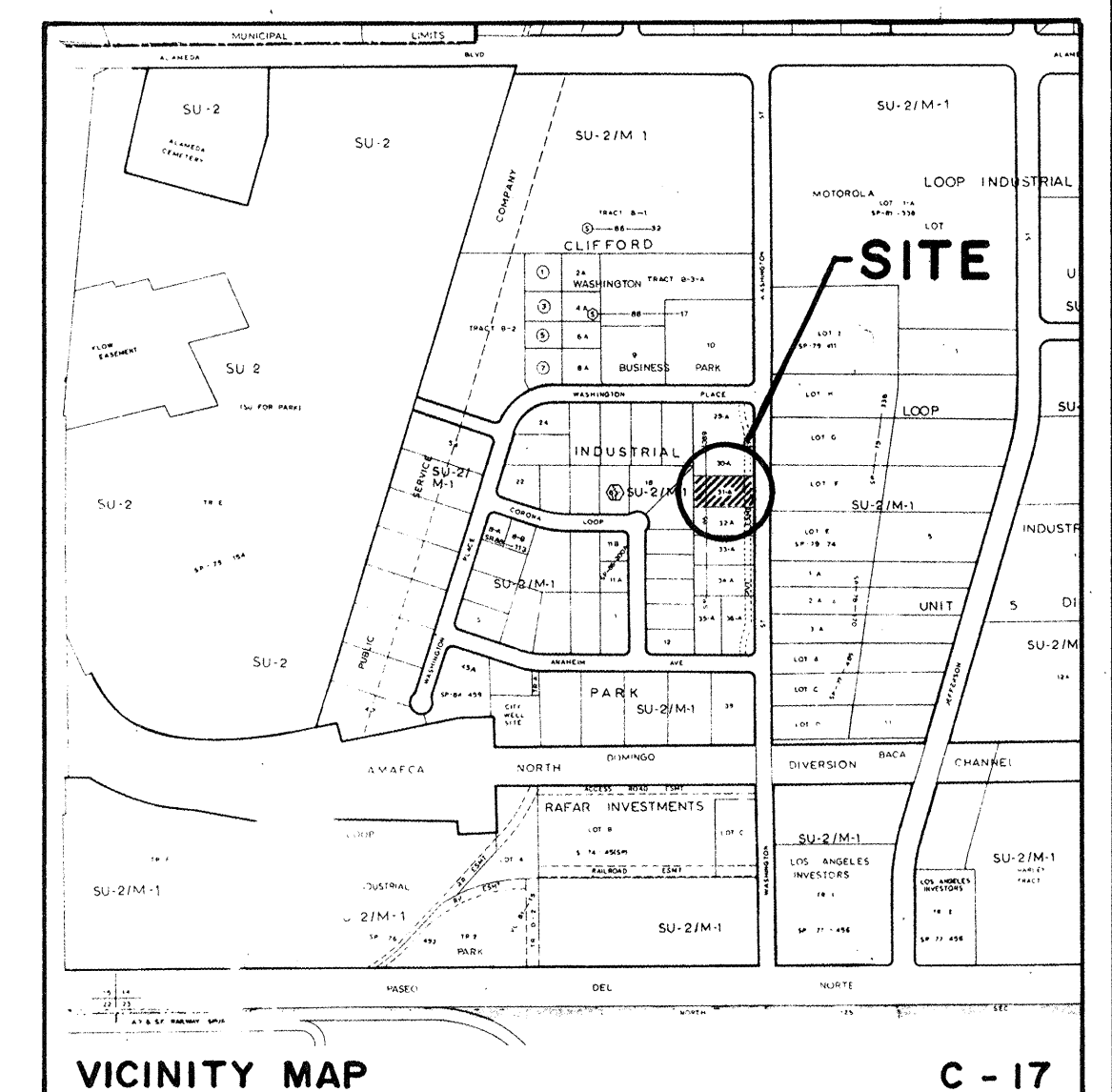
$V_{10} = 0.657 \times 2125 = 1396$ CF

Developed:

$V_{100} = \frac{(2.10 \times 26770 + 0.15 \times 2380 + 0.85 \times 850)}{12} = 4775$ CF

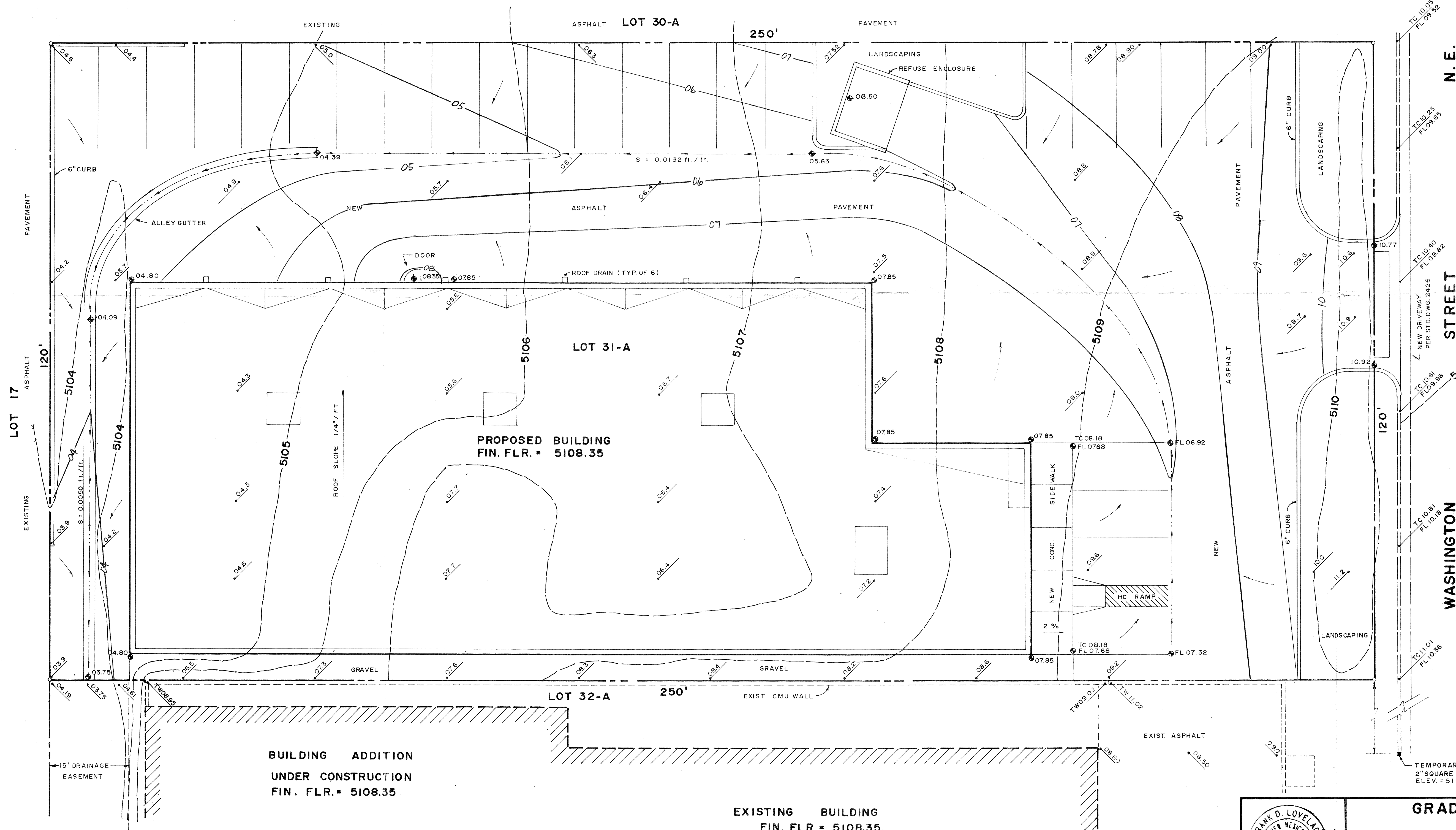
$V_{10} = 0.657 \times 4775 = 3137$ CF

SCALE 1"=10'



VICINITY MAP

C - 17



LEGEND:

EXISTING	NEW	DESCRIPTION
---	---	5107 07 CONTOUR
+	+	SPOT ELEVATION
---	---	PROPERTY LINE
---	---	SWALE
---	---	SHEET FLOW
TC		TOP OF CONCRETE
TA		TOP OF ASPHALT
FL		FLOW LINE

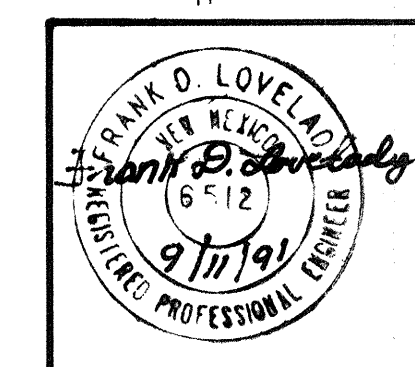
BENCH MARK:
The station mark is a 2 1/2 inch brass tablet stamped "Univ. Contractors, Inc. N.E. Prop. Cor. - NAA-8A", set in concrete projecting 0.3 ft. Elevation = 5092.19 Feet.

TEMPORARY BENCH MARK (TBM):
Two inch square chiseled on top of curb 62' south of the projected south property line of the site. Elevation = 5111.44 Feet.

LEGAL DESCRIPTION:
Lot 31-A, Tract B-1, Clifford Industrial Park Subdivision.

- GENERAL NOTES:**
- As per master drainage plan prepared by Bohannon-Huston, Inc., for Clifford Industrial Park, dated August, 1982, this site is allowed free discharge to improved swale in 15' drainage easement.
 - Minimal off-site flows may enter the site from the property north of the site. These are accepted.
 - All elevations are mean sea level (M.S.L.). Add 5100 to spot elevations to obtain actual M.S.L. elevations.
 - The site does not lie in a 100-year flood plain.
 - See Architectural Site Plan for dimensions of building and parking lot layout.
 - Contour Interval = 1'.

TEMPORARY BENCH MARK (TBM)
2" SQUARE CHISELED ON TOP OF CURB
ELEV. = 5111.44



GRADING AND DRAINAGE PLAN
PROPOSED BUILDING FOR
ROTEK CORPORATION
8401 WASHINGTON STREET, N.E.
ALBUQUERQUE, NEW MEXICO