City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

March 15, 1994

Jeff Mortensen
Jeff Mortensen & Associates Inc.
6010-B Midway Park Blvd. NE
Albuquerque, NM 87109

RE: GRADING/DRAINAGE PLAN FOR HAZELDINE PARK (K14-D59)
ENGINEER'S STAMP DATED 3/5/94.

Dear Mr. Mortensen:

Based on the information provided on your March 7, 1994 submittal, the above referenced site is approved for Grading Permit.

If I can be of further assistance, please feel free to contact me at 768-2667.

Sincerely,

Bernie J. Montoya, CE
Engineering Associate

BJM/dl/WPHYD/8382

c: Andrew Garcia
File

DRAINAGE INFORMATION SHEET

940211

PROJECT TITLE: Hazeldine Park ZONE ATLAS/DRNG. FILE #: K14/D59

DRB #: _____ EPC #: _____ WORK ORDER #: _____

LEGAL DESCRIPTION: North ½ of Lots 11 thru 14, Block 4 of the Atlantic and Pacific Addition

CITY ADDRESS: Southeast corner of Hazeldine AVE & 3rd Street, S.E.

ENGINEERING FIRM: Jeff Mortensen & Assoc. Inc. CONTACT: Michele F. DeLilla

ADDRESS: 6010-B Midway Park Blvd N.E. PHONE: 345-4250

OWNER: C.O.A. CONTACT: COPA

ADDRESS: _____ PHONE: _____

ARCHITECT: Campbell, Okuma, Perkins & Assoc. (COPA) CONTACT: Bill Perkins

ADDRESS: 418 Central SE PHONE: 242-9928

SURVEYOR: C.O.A. CONTACT: COPA

ADDRESS: _____ PHONE: _____

CONTRACTOR: N/A CONTACT: _____

ADDRESS: _____ PHONE: _____

TYPE OF SUBMITTAL:

- ___ DRAINAGE REPORT
- X DRAINAGE PLAN
- ___ CONCEPTUAL GRADING & DRAINAGE PLAN
- X GRADING PLAN
- ___ EROSION CONTROL PLAN
- ___ ENGINEER'S CERTIFICATION
- ___ OTHER

PRE-DESIGN MEETING:

- ___ YES
- X NO
- ___ COPY PROVIDED

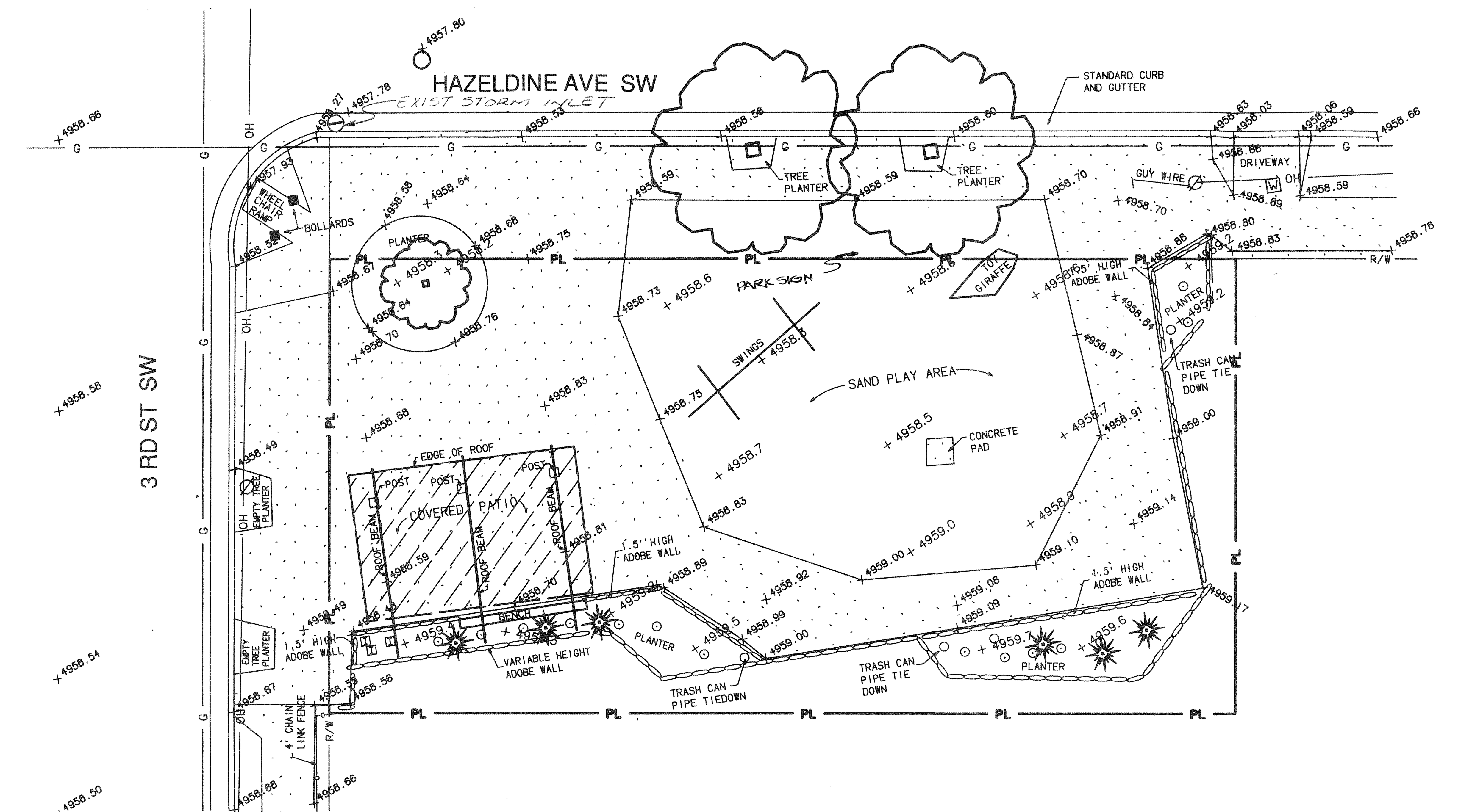
CHECK TYPE OF APPROVAL SOUGHT:

- ___ SKETCH PLAT APPROVAL
- ___ PRELIMINARY PLAT APPROVAL
- ___ S. DEV. PLAN FOR SUB'D. APPROVAL
- ___ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
- ___ SECTOR PLAN APPROVAL
- ___ FINAL PLAT APPROVAL
- ___ FOUNDATION PERMIT APPROVAL
- ___ BUILDING PERMIT APPROVAL
- ___ CERTIFICATE OF OCCUPANCY APPROVAL
- X GRADING PERMIT APPROVAL
- ___ PAVING PERMIT APPROVAL
- ___ S.A.D. DRAINAGE REPORT
- ___ DRAINAGE REQUIREMENTS
- ___ OTHER _____ (SPECIFY)

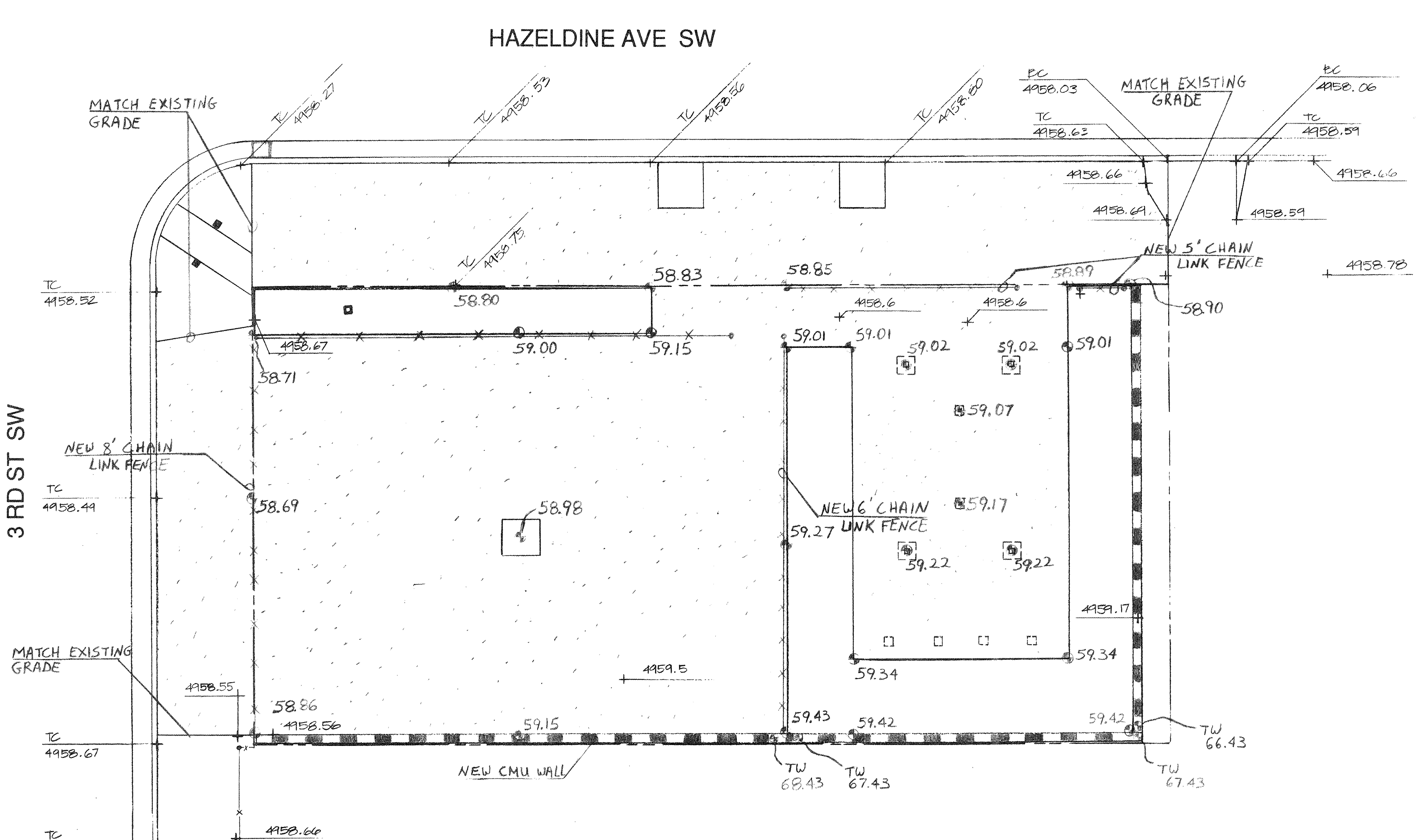
DATE SUBMITTED: 3/7/94

BY: Michele (Mike) DeLilla

RECEIVED
MAR - 7 1994



EXISTING CONDITION



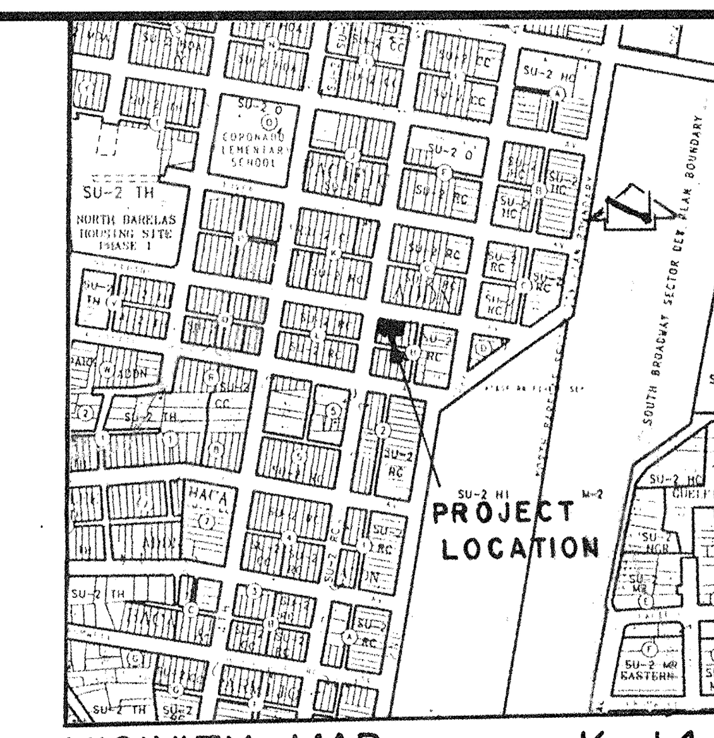
PROPOSED CONDITION

LEGAL DESCRIPTION

THE NORTH 1/2 OF LOTS 11 THRU 14, BLOCK H OF THE ATLANTIC AND PACIFIC ADDITION

LEGEND

TC	TOP OF CURB
	NEW CMU WALL
	PROPOSED CONCRETE
	PROPOSED SPOT ELEV.
	NEW CHAIN LINK FENCE
+	EXISTING SPOT ELEV.
TW	TOP OF WALL
	EXISTING STORM INLET



VICINITY MAP K-14
SCALE: 1" = 750'

DRAINAGE PLAN

The following items concerning the Hazeldine Park Grading & Drainage Plan are contained hereon:

1. Vicinity Map
2. Grading Plan
3. Calculations

As shown by the Vicinity Map, the site is located at the southeast corner of Third Street S.W. and Hazeldine Avenue S.W. At present, the site is a park with concrete surfaces and a sand play area with swings. The park has adobe walls on the south and east sides of the site. Improvements to the site will include the regrading of the park, along with associated concrete removal and replacement for a basketball court along with benches and a shade structure. Free discharge for this site is appropriate, because it lies in an infill area, is already developed, it maintains its historical drainage pattern, and the negligible increase in developed runoff.

As shown on Panel 28 of 50 of the National Flood Insurance Program Flood Insurance Rate Maps for the City of Albuquerque, New Mexico, dated October 14, 1983, this site does not lie within a designated flood hazard zone. A flood hazard zone designed Zone B lies approximately 1050 feet west of the site. At present, the site drains onto Hazeldine Avenue S.W. and Third Street S.W. which then drains into an existing storm inlet located on Hazeldine on the southeast corner of the intersection of Third Street S.W. and Hazeldine Avenue S.W.

The Grading and Drainage Plan shows: 1) existing and proposed grades indicated by spot elevations, 2) limit and character of the existing improvements, 3) limit and character of the proposed improvements, and 4) continuity between existing and proposed grades. The developed site will be characterized as one basin which will drain onto Third Street S.W. and Hazeldine Avenue S.W. No offsite flows will enter from the north and west because developed streets lie on those sides. Grades on the south and east sides of the site are "flat" so no offsite flows will enter from those sites.

The Calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The Procedure for 40-acre and Smaller Basins, as set forth in the Revision of Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria, dated January, 1993, has been used to quantify the peak rate of discharge and volume of runoff generated. As shown by these calculations, the proposed development will result in a small increase in runoff generated.

CALCULATIONS

Site Characteristics

1. Precipitation Zone = 2
2. $P_{6,100} = P_{360} =$ 2.35 in.
3. Total Area (A_T) = 0.115 Acres
4. Existing Land Treatment

Treatment	Area (sf/ac)	%
B	2,789/0.064	55.7
D	2,221/0.051	44.3

5. Developed Land Treatment

Treatment	Area (sf/ac)	%
B	1,176/0.027	23.5
D	3,834/0.088	76.5

Existing Condition

1. Volume

$$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$$
$$E_W = [(0.78)(0.064)+(2.12)(0.051)]/(0.115) = 1.37 \text{ in.}$$
$$V_{100} = (E_W/12)A_T$$
$$V_{100} = (1.37/12)(0.115) = 0.0132 \text{ ac.ft.; } 574 \text{ cf}$$

2. Peak Discharge

$$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$$
$$Q_p = Q_{100} = (2.28)(0.064)+(4.70)(0.051) = 0.4 \text{ cfs}$$

Developed Condition

1. Volume

$$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$$
$$E_W = [(0.78)(0.027)+(2.12)(0.088)]/(0.115) = 1.81 \text{ in.}$$
$$V_{100} = (E_W/12)A_T$$
$$V_{100} = (1.81/12)(0.115) = 0.0173 \text{ ac.ft.; } 754 \text{ cf}$$

2. Peak Discharge

$$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$$
$$Q_p = Q_{100} = (2.28)(0.027)+(4.70)(0.088) = 0.5 \text{ cfs}$$

Comparison

1. $\Delta V_{100} = 754 - 574 = 180$ cf (increase)
2. $\Delta Q_{100} = 0.5 - 0.4 = 0.1$ cfs (increase)

Construction Notes:

1. Two (2) working days prior to any excavation, contractor must contact New Mexico One Call System 260-1990, for location of existing utilities.
2. Prior to construction, the contractor shall excavate and verify the horizontal and vertical location of all potential obstructions. Should a conflict exist, the contractor shall notify the engineer in writing so that the conflict can be resolved with a minimum amount of delay.
3. All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
4. All construction within public right-of-way shall be performed in accordance with applicable City of Albuquerque Standards and Procedures.
5. If any utility lines, pipelines, or underground utility lines are shown on these drawings, they are shown in an approximate manner only, and such lines may exist where none are shown. If any such existing lines are shown, the location is based upon information provided by the owner of said utility, and the information may be incomplete, or may be obsolete by the time construction commences. The engineer has conducted only preliminary investigation of the location, depth, size, or type of existing utility lines, pipelines, or underground utility lines. This investigation is not conclusive, and may not be complete, therefore, makes no representation pertaining thereto, and assumes no responsibility or liability therefor. The contractor shall inform itself of the location of any utility line, pipeline, or underground utility line in or near the area of the work in advance of and during excavation work. The contractor is fully responsible for any and all damage caused by its failure to locate, identify and preserve any and all existing utilities, pipelines, and underground utility lines. In planning and conducting excavation, the contractor shall comply with state statutes, municipal and local ordinances, rules and regulations, if any, pertaining to the location of these lines and facilities.
6. The design of planters and landscaped areas is not part of this plan. All planters and landscaped areas adjacent to the building(s) shall be provided with positive drainage to avoid any ponding adjacent to the structure. For construction details, refer to landscaping plan.
7. This is not a Boundary Survey; all survey data provided by C.O.A. Survey Section, Public Works Department.

Erosion Control Measures:

1. The contractor shall ensure that no soil erodes from the site into public right-of-way or onto private property. This can be achieved by constructing temporary berms at the property lines and wetting the soil to keep it from blowing.
2. The contractor shall promptly clean up any material excavated within the public right-of-way so that the excavated material is not susceptible to being washed down the street.
3. The contractor shall secure "Topsoil Disturbance Permit" prior to beginning construction.

Campbell Okuma Perkins Associates, Inc.
Landscape Architecture and Site Planning
418 Central S.E. Albuquerque, NM 87102 (505) 242-9928
1339 Pacheco No. 8 Santa Fe, NM 87501 (505) 962-8399

AS BUILT INFORMATION: CONTRACTOR; WORK STAKED BY — DATE; INSPECTORS APPROVAL — DATE; FIELD VERIFICATION BY — DATE; DRAWING CORRECTED BY — DATE

MICRO-FILM INFORMATION: RECORDED BY — DATE; NO.

BENCH MARK: ACS MONUMENT "23-K14", LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION OF FOURTH ST. AND ATLANTIC AVE. S.W.; NAVD 1929 ELEVATION 4957.57 FEET.

SURVEY INFORMATION

NO.	FIELD NOTES	BY	DATE
	CITY OF ALBUQUERQUE		4-22-93

ENGINEER'S SEAL: JAMES G. MORTENSEN, NEW MEXICO, 8547, REGISTERED PROFESSIONAL ENGINEER

REVISIONS / REMARKS

NO.	DATE	REVISIONS / REMARKS	BY

DESIGNED BY: M.F.D. DATE: 3/94
DRAWN BY: C.O.P.A. / J.M.A. DATE: 3/94
CHECKED BY: J.G.M. DATE: 3/94

JMA
JEFF MORTENSEN & ASSOCIATES, INC.
6010-B MIDWAY PARK BLVD. N.E.
ALBUQUERQUE NEW MEXICO 87109
ENGINEERS SURVEYORS (505) 345-4250
940211

NORTH

0 5' 10' 20'
SCALE: 1" = 10'-0"

CITY OF ALBUQUERQUE
PARKS / GENERAL SERVICES
DESIGN & DEVELOPMENT

TITLE: HAZELDINE PARK
GRADING AND DRAINAGE PLAN

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN			WATER		
TRANSPORTATION			WASTE WATER		
HYDROLOGY					
PARKS					

PROJECT NO. | MAP NO. K-14 | SHEET 1 OF 1