

CONSTRUCT 1'-24"  
SIDEWALK CULVERT  
PER C.O.A. STD.  
DWG. 2236

Construction Notes:

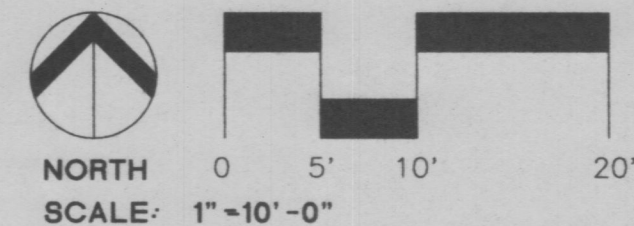
- Two (2) working days prior to any excavation, contractor must contact New Mexico One Call System 260-1990, for location of existing utilities.
- Prior to construction, the contractor shall excavate and verify the horizontal and vertical location of all potential obstructions. Should a conflict exist, the contractor shall notify the engineer in writing so that the conflict can be resolved with a minimum amount of delay.
- 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.
- All construction within public right-of-way shall be performed in accordance with applicable City of Albuquerque Standards and Procedures.
- 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.
- 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.

Erosion Control Measures:

- The contractor shall ensure that no soil erodes from the site into public right-of-way or onto private property.
- 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.
- 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

901 W. Santa Fe Suite L  
Santa Fe, NM 87505  
(505) 982-8399



**Kells and Craig**  
Architects, Inc. AIA

P.O. Box 27394  
201 Coal Ave. SW  
Albuquerque, New Mexico 87125

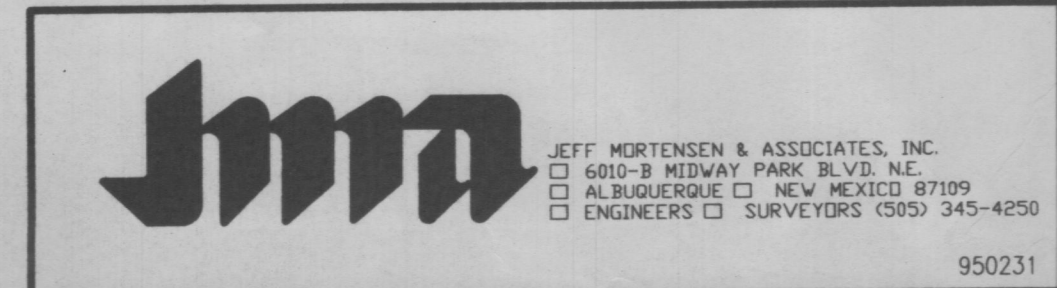
(505) 243-2724

CITY OF ALBUQUERQUE  
PARKS AND GENERAL SERVICES  
DESIGN & DEVELOPMENT DIVISION

**TITLE: TRUMBULL COMMUNITY CENTER  
GRADING AND DRAINAGE PLAN**

NO.	DATE	REVISIONS/REMARKS	BY	ENGINEER'S SEAL	SURVEY INFORMATION	BENCH MARK	AS BUILT INFORMATION
					DATE: 4-95 BY: JMA N/A	DATE: 4-95 BY: JMA N/A	DATE: 4-95 BY: JMA N/A
					DATE: 4-95 BY: JMA N/A	DATE: 4-95 BY: JMA N/A	DATE: 4-95 BY: JMA N/A
					DATE: 4-95 BY: JMA N/A	DATE: 4-95 BY: JMA N/A	DATE: 4-95 BY: JMA N/A
					DATE: 4-95 BY: JMA N/A	DATE: 4-95 BY: JMA N/A	DATE: 4-95 BY: JMA N/A
					DATE: 4-95 BY: JMA N/A	DATE: 4-95 BY: JMA N/A	DATE: 4-95 BY: JMA N/A
					DATE: 4-95 BY: JMA N/A	DATE: 4-95 BY: JMA N/A	DATE: 4-95 BY: JMA N/A
					DATE: 4-95 BY: JMA N/A	DATE: 4-95 BY: JMA N/A	DATE: 4-95 BY: JMA N/A
					DATE: 4-95 BY: JMA N/A	DATE: 4-95 BY: JMA N/A	DATE: 4-95 BY: JMA N/A
					DATE: 4-95 BY: JMA N/A	DATE: 4-95 BY: JMA N/A	DATE: 4-95 BY: JMA N/A

City Project No. 4876-01  
Zone Map No. 19-Z  
Sheet G of 1  
JUN - 7 1995  
HYDROLOGY DIVISION



**T.B.M.**  
A SQUARE CHISELED ON TOP OF THE CONCRETE CURB NEAR THE NORTHEAST CORNER OF THE SITE AS SHOWN ON THE DRAWING. ELEVATION = 5381.31 FEET (M.S.L.D.)

**LEGAL DESCRIPTION**  
LOTS 10B, 11B AND 12B, BLOCK 5A, CASAS SERENAS ADDITION, C25 - 193

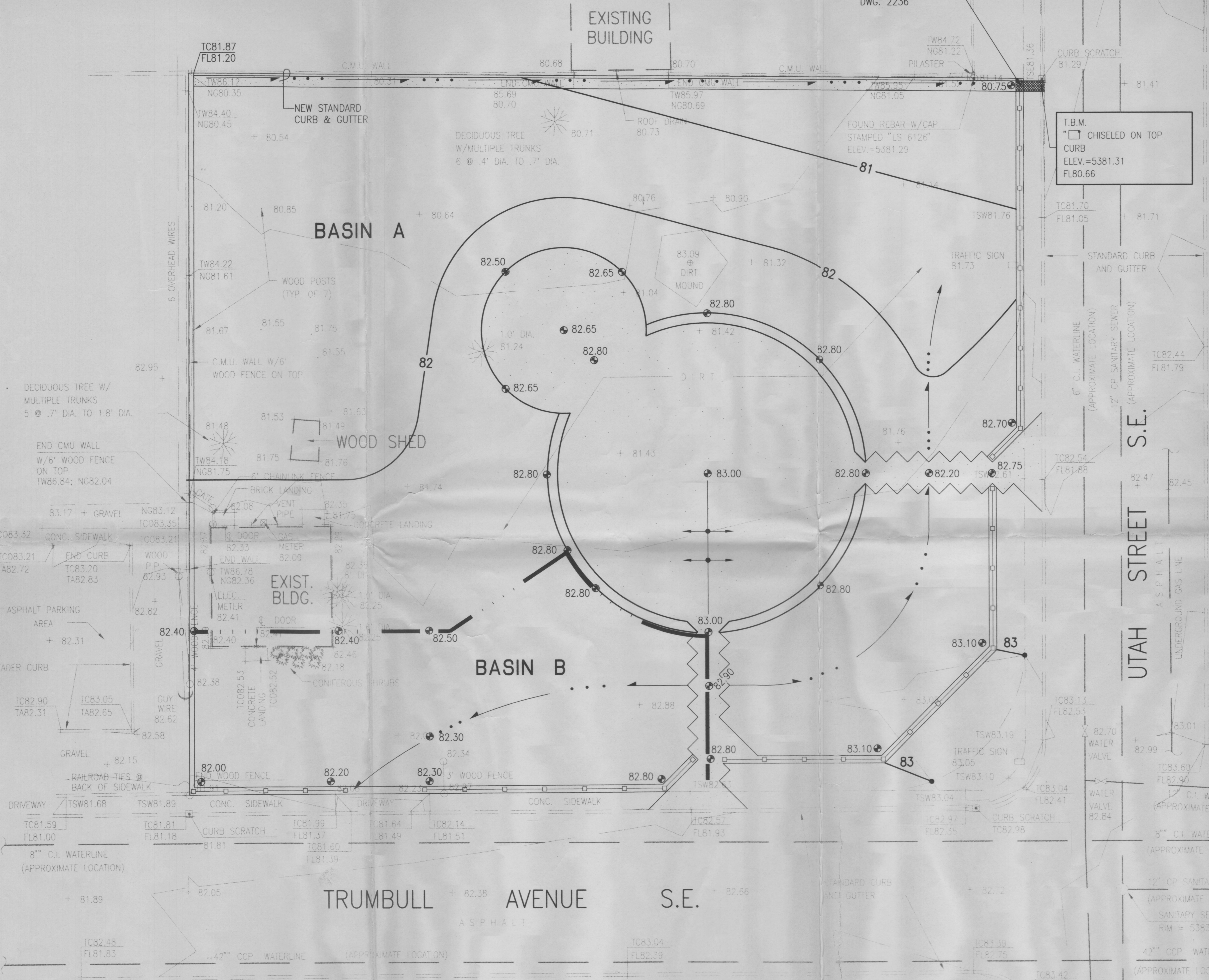
WATER AND SANITARY SEWER LINES ARE SHOWN IN AN APPROXIMATE MANNER ONLY. LOCATION DATA WAS TAKEN FROM CITY OF ALBUQUERQUE WATER AND SANITARY SEWER DISTRIBUTION MAPS.

**LEGEND**

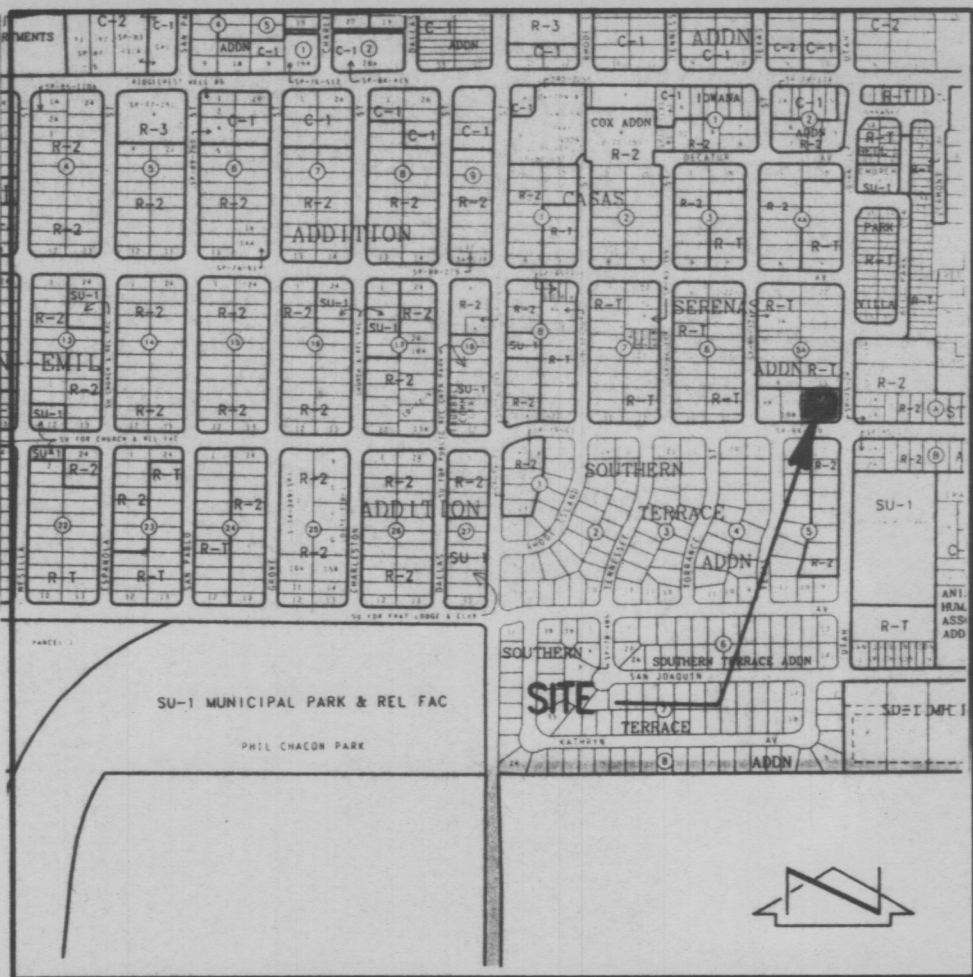
TC TOP OF CURB  
TA TOP OF ASPHALT  
TSW TOP OF SIDEWALK  
TCD TOP OF CONCRETE  
FL FLOW LINE  
NG NATURAL GROUND  
FTC FOOTING  
P.P. POWER POLE

EXISTING SPOT ELEVATION  
EXISTING CONTOUR  
TOP OF CURB  
TOP OF ASPHALT  
TOP OF SIDEWALK  
TOP OF CONCRETE  
FLOW LINE  
NATURAL GROUND  
FOOTING  
POWER POLE

PROPOSED CONTOUR  
PROPOSED SPOT ELEVATION  
PROPOSED FLOW LINE  
PROPOSED BASIN BOUNDARY







VICINITY MAP

SCALE: 1" = 750'±

L-19

CALCULATIONS

Site Characteristics

- Precipitation Zone = 3
- $P_{6,100} = P_{360} = 2.60$  in.
- Total Area ( $A_T$ ) = 23,540 sf/0.54 ac.
- Existing Land Treatment
 

Treatment	Area (sf/ac)	%
B	22,740/0.52	96
D	800/0.02	04
- Developed Land Treatment
 

Basin	Treatment	Area (sf/ac)	%
A	B	3,410/0.078	96
	D	130/0.003	04
B	B	17,940/0.41	77
	D	5,060/0.12	23

Existing Condition

- Volume
 
$$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$$

$$E_W = [(0.92)(0.52) + (2.36)(0.02)] / (0.54) = 0.97 \text{ in.}$$

$$V_{100} = (E_W / 12) A_T$$

$$V_{100} = (0.97 / 12)(0.54) = 0.044 \text{ ac-ft} = 1,920 \text{ cf}$$
- Peak Discharge
 
$$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$$

$$Q_p = Q_{100} = (2.60)(0.52) + (5.02)(0.02) = 1.5 \text{ cfs}$$

Developed Condition

A. Basin A

- Volume
 
$$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$$

$$E_W = [(0.92)(0.078) + (2.36)(0.003)] / (0.081) = 0.973 \text{ in.}$$

$$V_{100} = (E_W / 12) A_T$$

$$V_{100} = (0.973 / 12)(0.081) = 0.0066 \text{ ac-ft} = 290 \text{ cf}$$
- Peak Discharge
 
$$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$$

$$Q_p = Q_{100} = (2.60)(0.078) + (5.02)(0.003) = 0.2 \text{ cfs}$$

B. Basin B

- Volume
 
$$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$$

$$E_W = [(0.92)(0.41) + (2.36)(0.12)] / (0.53) = 1.25 \text{ in.}$$

$$V_{100} = (E_W / 12) A_T$$

$$V_{100} = (1.25 / 12)(0.53) = 0.055 \text{ ac-ft} = 2,400 \text{ cf}$$
- Peak Discharge
 
$$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$$

$$Q_p = Q_{100} = (2.60)(0.41) + (5.02)(0.12) = 1.7 \text{ cfs}$$

Comparison

- $\Delta V_{100} = (2,400 + 290) - 1,920 = 770 \text{ cf (increase)}$
- $\Delta Q_{100} = (1.7 + 0.2) - 1.5 = 0.2 \text{ cfs (increase)}$

DRAINAGE PLAN

The following items concerning the Trumbull Community Center Grading and Drainage Plan are contained hereon:

- Vicinity Map
- Grading Plan
- F.I.R.M.
- Calculations

As shown by the Vicinity Map, the site is located at the northwest corner of the intersection of Trumbull Avenue S.E. and Utah Street S.E. Currently, the site is undeveloped except for a small residence located at the west end of the property.

As shown by Panel 36 of 50 of the National Flood Insurance Program Flood Insurance Rate Maps published by F.E.M.A. for the City of Albuquerque, New Mexico dated October 14, 1983, this site lies within mapped floodplain designated "AO", with a depth of one.

The Grading Plan shows: 1) existing and proposed grades indicated by spot elevations and contours at 1'0" intervals, 2) the limit and character of the existing improvements, 3) the limit and character of the proposed improvements, and 4) continuity between existing and proposed grades. As shown by this plan, the proposed improvements consist of the construction of a City park consisting of landscaped and concrete areas. At present, the site sheet drains to the north in an irregular fashion. The proposed grading will cause the majority of the site generated runoff to discharge onto Utah Street S.E. through a sidewalk culvert which is to be constructed at the northeast corner of the site. A very small drainage basin located at the southwest corner of the site will discharge developed runoff to Trumbull Avenue S.E. via an existing driveway to remain for service/maintenance access.

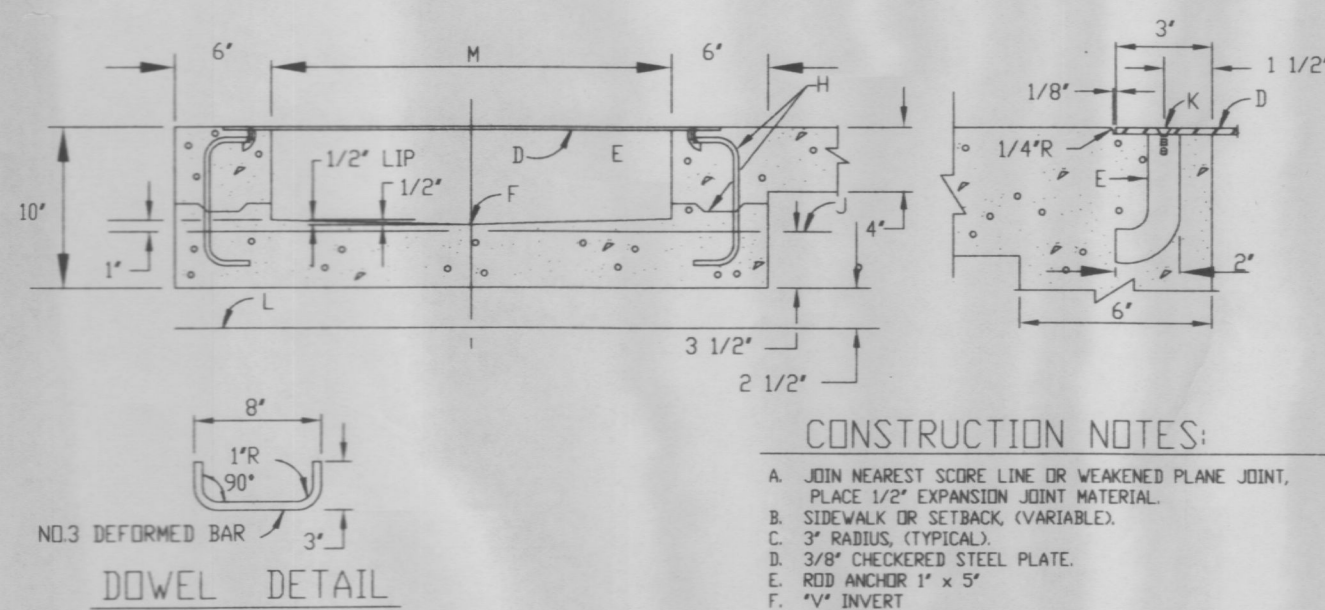
The Calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The Procedure for 40-acre and Smaller Basins, as set forth in the Revision of Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria, dated January, 1993, has been used to quantify the peak rate of discharge and volume of runoff generated. As shown by these calculations, a slight increase in the peak rate and volume of discharge will be observed due to the proposed construction. Because the increase in runoff and discharge will be slight, and the site lies within an existing infill area, the continued free discharge of runoff from this site is appropriate. Furthermore, creating a pond within a small neighborhood park should be avoided.



FLOODPLAIN MAP

SCALE: 1" = 500'

PANEL 36 OF 50



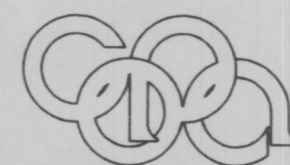
DOWEL DETAIL

CONSTRUCTION NOTES:

- JOIN NEAREST SCORE LINE OR WEAKENED PLANE JOINT.
- PLACE 1/2" EXPANSION JOINT MATERIAL.
- SIDEWALK OR SETBACK (VARIABLE).
- 3" RADIUS (TYPICAL).
- 3/8" CHECKERED STEEL PLATE.
- ROD ANCHOR 1" x 5'.
- 1/4" INVERT.
- SIDEWALK GRADE.
- DOWEL AND JOINT (OPTIONAL).
- GUTTER FLOWLINE ELEV.
- 3/8" x 1" F.H. CSWANK STAINLESS STEEL MACHINE SCREW.
- BOTTOM OF GUTTER.
- DRAIN WIDTH 24" MAX. 12" MIN.
- SLOPE 1/4" PER FT. MIN.

TYPICAL SIDEWALK CULVERT DETAILS

NOT TO SCALE



Campbell Okuma Perkins Associates, Inc.  
Landscape Architecture and Site Planning  
418 Central S.E. Albuquerque, NM 87102  
(505) 242-9928

901 W. Son Mateo Suite L  
Santa Fe, NM 87505  
(505) 982-8399



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

**Kells and Craig**

Architects, Inc. AIA

P.O. Box 27324  
201 Coal Ave. SW  
Albuquerque, New Mexico 87125

(505) 243-2724

CITY OF ALBUQUERQUE  
PARKS AND GENERAL SERVICES  
DESIGN & DEVELOPMENT DIVISION

TITLE: TRUMBULL COMMUNITY CENTER  
GRADING AND DRAINAGE PLAN

Design Review Committee	City Engineer Approval	MLZ/JAY/YR	MLZ/JAY/YR
City Project No.	4876-01	Zone-Map No.	L-19-Z
		Sheet	G

JUN - 7 1995

HYDROLOGY DIVISION

**JMA**

JEFF MORTENSEN & ASSOCIATES, INC.  
4001-B MIDWAY PARK BLVD. NE.  
ALBUQUERQUE, NEW MEXICO 87109  
ENGINEERS SURVEYORS (505) 345-4250

950231