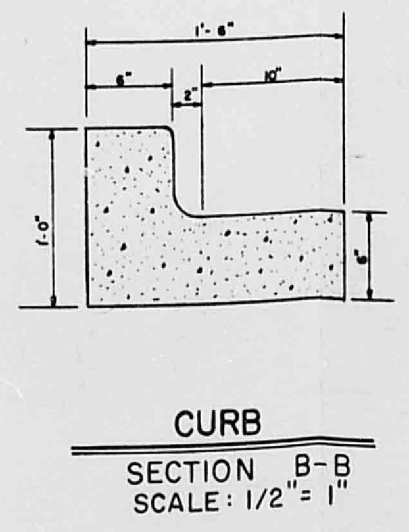
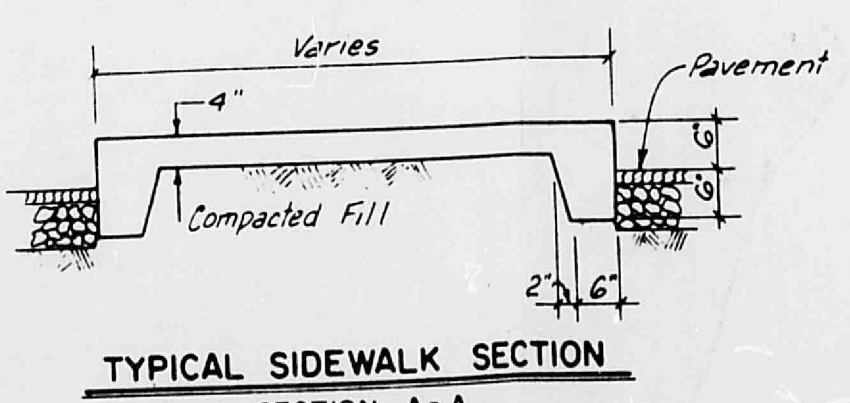
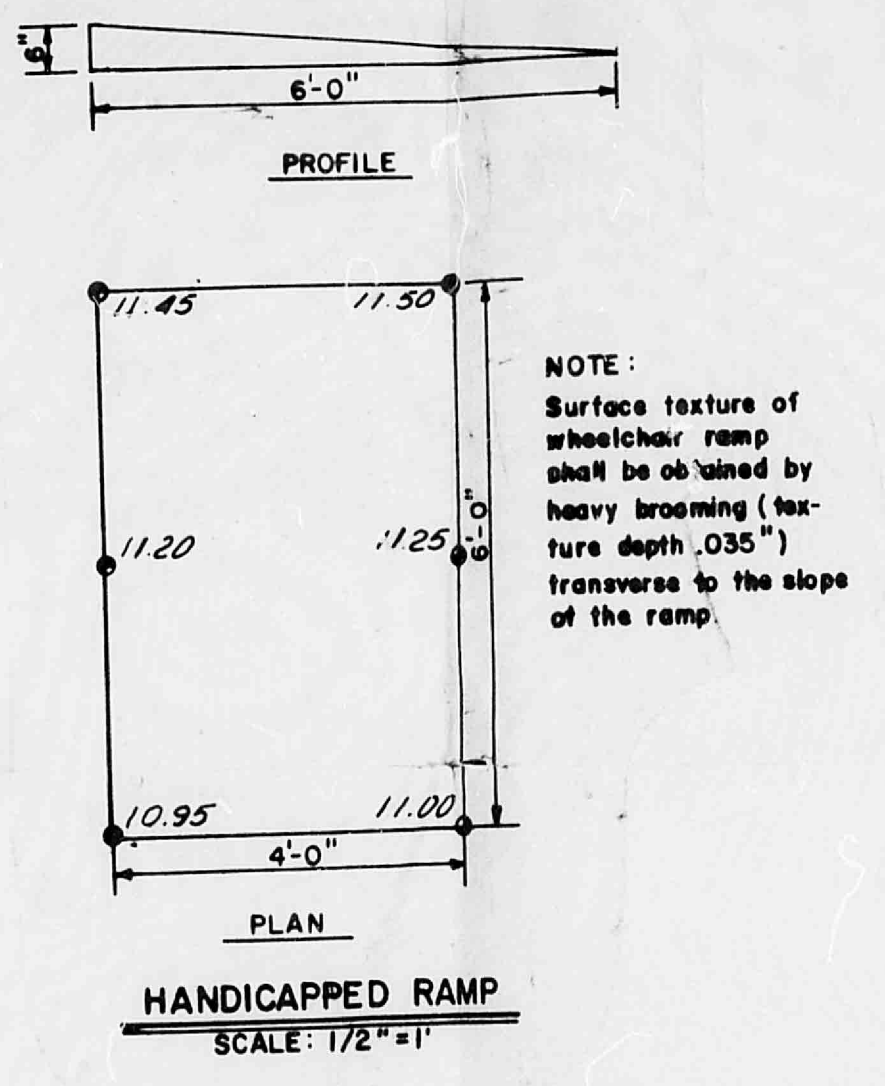


**LEGAL DESCRIPTION**  
 LOTS 7A & 8A, BLOCK 4, BEL-AIR  
 SUBDIVISION, SECTION 14, TOWN-  
 SHIP 10 NORTH, RANGE 3 EAST  
 OF NEW MEXICO PRINCIPAL MERIDIAN,  
 CITY OF ALBUQUERQUE, COUNTY OF  
 BERNALILLO, STATE OF NEW MEXICO.



**DRAINAGE PLAN FOR TACO BELL SITE**

**PURPOSE**  
 The purpose of this report is to outline the drainage management plan for the development of a 0.26 acre commercial site. Development is to include the construction of a Taco Bell restaurant. Chapter 22 of the Development Process Manual (DPM) has been used to develop this plan.

**SITE LOCATION AND DESCRIPTION**  
 The Taco Bell restaurant is currently located on the northwest corner of Menaul Boulevard and San Mateo Boulevard. This intersection is to be reconstructed and widened, at which time the present building will be removed. It will be rebuilt to the north on the present site of the Water Resources storage tank. The current building location will become parking for the new building.  
 At this time, the Taco Bell parking lot drains to Menaul Boulevard and then to a storm drain inlet located at the corner of Menaul Boulevard and Truman Street. The Water Resources storage tank site drains to the alley dividing the two sites and then flows west through the alley. A water block serves as the drainage divide between the southern edge of the alley and the present Taco Bell parking lot. No previous drainage report exists which covers this area.

**EXISTING CONDITIONS**  
 The peak flow rate for the existing drainage basins, which include the existing building parking lot (Drainage Basin A) and the storage tank (Drainage Basin B), were determined by the application of the Rational Method. The time of concentration was calculated to be less than ten minutes, therefore, ten minutes was used in all calculations. Rainfall intensity was determined by applying Plates 22.2 D-1 and 22.2 D-2 of the DPM.

The following flow rates were calculated for the two basins in their present condition:

Basin	Area (Acres)	% Imperv.	"C" Factor	Intensity (in/hr)	Flowrate (cfs)	10-yr	100-yr	10-yr	100-yr
A. Existing Taco Bell & Parking Lot	0.33	100%	1.00	3.20	4.88	1.06	1.61		
B. Existing Water Resources Tank & Alley	0.32	69.7	0.69	3.20	4.88	0.71	1.09		

**LEGEND**

- DIRECTION OF FLOW
- - - PROPERTY BOUNDARY
- - - EXIST. CONTOURS
- - - PROPOSED CONTOURS
- ⊙ EXIST. SPOT ELEVATIONS
- ⊙ PROPOSED SPOT ELEVATIONS
- - - EXIST. CURB & GUTTER
- - - PROPOSED CURB & GUTTER
- ⊙ EXIST. MANHOLES
- - - PROPOSED DRAINAGE BASIN
- - - EXISTING DRAINAGE BASIN
- - - RETAINING WALL
- ⊙ CONCRETE
- ⊙ ROOF DRAIN

**PROPOSED CONDITIONS**

The peak flow rate for the proposed drainage basin under proposed conditions was determined in the same manner as flow rates for the basins as they now exist. The following flowrates were calculated for the two basins under proposed conditions:

Basin	Area (Acres)	% Imperv.	"C" Factor	Intensity (in/hr)	Flowrate (cfs)	10-yr	100-yr	10-yr	100-yr
A. Proposed Parking Lot	0.26	100%	1.00	3.20	4.68	0.83	1.27		
B. Proposed Taco Bell Restaurant	0.28	84.3	0.80	3.20	4.88	0.72	1.09		

Flows from the parking area will continue to discharge to Menaul Boulevard and hence to the storm drain inlet at Truman Street and Menaul Boulevard. Flows from the current Water Resources storage tank site and alley will discharge to the alley and flow in a westerly direction down the alley. It is proposed that the new building site continue to drain in this manner. Comparing the existing condition flow rates with the proposed condition values, there will be no increase in runoff flow added to the alley due to the construction of the new building.

**SUMMARY AND CONCLUSIONS**

The Taco Bell at San Mateo Boulevard and Menaul Boulevard will be a commercial development on approximately 0.26 acre. This plan has utilized City Project No. 2053 for design parameters. Improvements under this project include widening of San Mateo Boulevard and construction of a concrete intersection at the San Mateo Boulevard and Menaul Boulevard intersection. Construction on the road project will begin in December 1985.

Hydrologic analysis of the ultimate development led to the following conclusions:

- \* On-site grading for the new building will provide for conveyance of flows to the alley.
- \* The construction of the new restaurant on the present Water Resources storage tank site will not increase the amount of runoff discharged to the alley.
- \* The drainage patterns for the area where the present Taco Bell restaurant is located will not be altered; runoff will continue to be directed to Menaul Boulevard and hence to a storm drain inlet at Truman Street and Menaul Boulevard.

**APPROVED FOR DRAINAGE**

DATE: 4/30/85  
 SIGNATURE: [Signature]  
 TITLE: [Title]

**ADVISE DRAINAGE INSPECTOR**

NEED GRADING EXECUTED BENCH MARKS

APR 17 1986  
 HYDROLOGY SECTION

T.B.M. Existing Sanitary Sewer Manhole in San Mateo Blvd. NE. Approx. 200' North of intersection with Menaul Blvd. NE. Rim Elev. 5210.71
Brass Cap - STA NM 367-8 Located in median of San Mateo Blvd. NE, 22' North of intersection with Culler Ave. NE Elev. 5204.26

**TACO BELL**  
 SAN MATEO BLVD. & MENAUL BLVD.  
 Project No. [Blank]  
**DRAINAGE PLAN**  
 Sheet 1 of 1  
 Date: 9-85  
 Scale: 1"=20'

APPROVED FOR ROUGH GRADING  
 [Signature]  
 HYDROLOGY ENGINEER DATE: 10-16-85

H17/D33