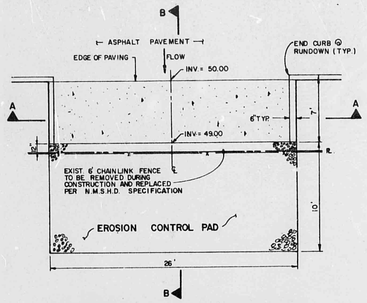
HYDROLOGY K21/D16a 2 PLANS

K21/D14A

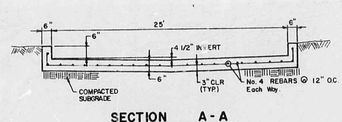
2 Plans

D 24 C 20 B 16 A 12 CITY OF ALBUQUERQUE C D



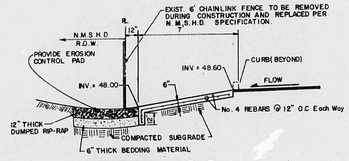
DRAINAGE RUNDOWN 'A' PLAN

SCALE: 1" = 05' DETAIL 'G'



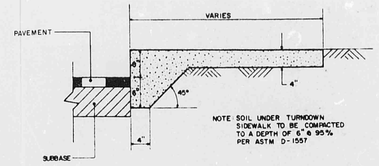
SECTION A-A

SCALE: 1" = 05' H 1" = 02' V



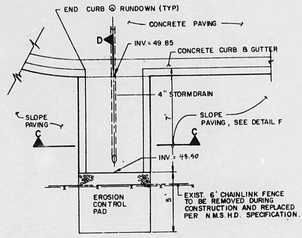
SECTION B-B

SCALE: 1" = 04'



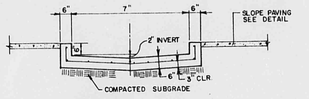
TURNDOWN SIDEWALK DETAIL 'E'

SCALE: 1" = 1'



DRAINAGE RUNDOWN 'B' PLAN

SCALE: 1" = 04' DETAIL 'H'

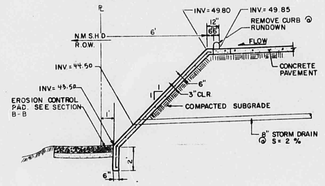


SECTION C-C

SCALE: 1" = 02'

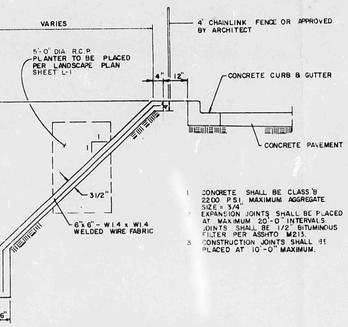
GRADATION FOR RIP-RAP	
MINIMUM DIA. (INCHES)	% SMALLER THAN, BY WEIGHT
12	100
9	35-55
2	10

* AT LEAST 30% OF ALL STONES BY WEIGHT MUST BE THIS SIZE



SECTION D-D

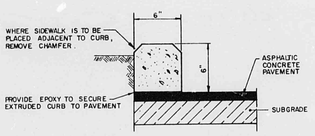
SCALE: 1" = 04'



1 CONCRETE SHALL BE CLASS 'B' 2200 P.S.I. MAXIMUM AGGREGATE SIZE = 3/4"
2 EXPANSION JOINTS SHALL BE PLACED AT MAXIMUM 20'-0" INTERVALS. JOINTS SHALL BE 1/2" BITUMINOUS FILTER PER AASHTO M213.
3 CONSTRUCTION JOINTS SHALL BE PLACED AT 10'-0" MAXIMUM.

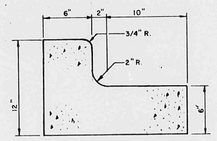
SLOPE PAVING DETAIL 'F'

SCALE: 1" = 02'



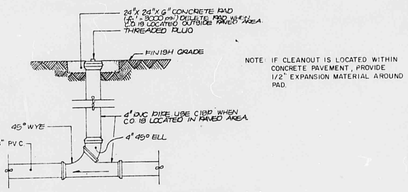
EXTRUDED CONCRETE CURB DETAIL 'A'

SCALE: 1" = 06"



CURB AND GUTTER DETAIL 'B'

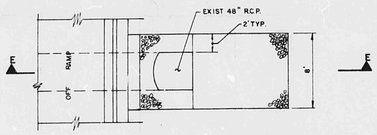
SCALE: 1" = 06'



NOTE: IF CLEANOUT IS LOCATED WITHIN CONCRETE PAVEMENT, PROVIDE 1/2" EXPANSION MATERIAL AROUND PAD.

TYPICAL SINGLE CLEANOUT DETAIL 'J'

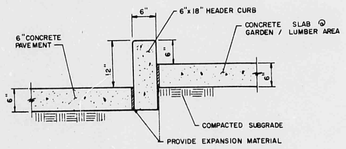
N.T.S.



EROSION CONTROL DETAIL 'K'

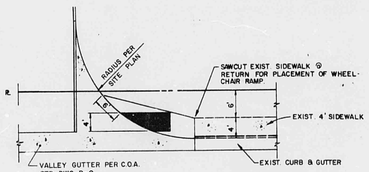
SCALE: 1" = 05'

NOTE: 6" CONCRETE PAVEMENT SHALL BE PLACED PER CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS PUBLIC WORKS CONSTRUCTION 1985, SECTION 337 AND STANDARD DWG P-2.



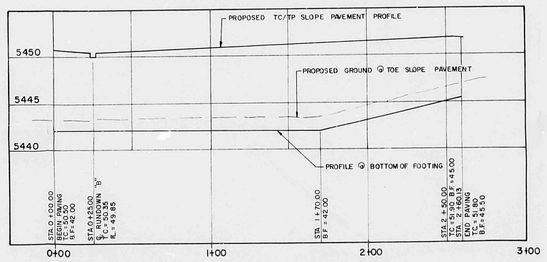
PERIMETER CURB DETAIL 'C'

SCALE: 1" = 1'-0"



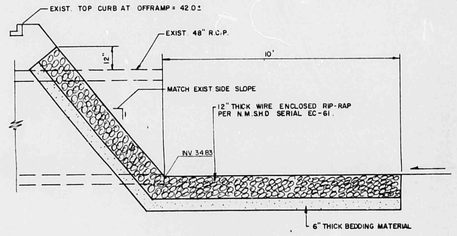
MODIFIED WHEELCHAIR RAMP DETAIL 'D'

SCALE: 1" = 10'



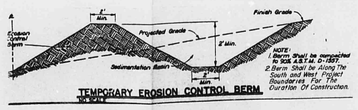
SLOPE PAVING PROFILE

SCALE: 1" = 30' H. 1" = 05' V.



SECTION E-E

SCALE: 1" = 02'



TEMPORARY EROSION CONTROL BERM

NTS

GRADING AND DRAINAGE PLAN

The grading and drainage plan shown on sheets C-2 and C-3 outlines the drainage criteria and provides the detail necessary to construct the improvements required to manage developed stormwater generated by Builder's Square and contributing drainage basins. The plan shows: 1) Grading plan described by spot elevations and contours at 1'-0" intervals; 2) Proposed pavement, sidewalks, curbs, swales, building footprint, landscaping, and retaining walls; 3) Quantified developed flowrates; 4) Drainage patterns and basins; 5) Proposed drainage facilities; 6) Erosion control measures; and 7) Construction details for paving and drainage improvements.

The project site is located on Hotel Circle NE, just North of Interstate 40. The site is bounded on the North by Hotel Circle NE, on the East by undeveloped land, on the South by I-40, and on the West by the Ramada Inn. The site is more particularly described as Tract 4-C1, Horne Development Addition. Builders Square is to be developed as a major retail store.

The site is presently undeveloped. Natural topography slopes towards the Southwest at approximately 3 percent. Offsite flows impact the site from the East in the form of sheet flows from the Tomasita Elementary School and the undeveloped Parcel (Tract 4-C2) located just East of the site. These flows, along with the undeveloped onsite flow, are drained by an existing 48-inch RCP culvert located at I-40 near the Southwest corner of the site. The culvert outfalls at the I-40 channel located between the East and West bound I-40 traffic lanes. The culvert is owned and maintained by the New Mexico State Highway Department.

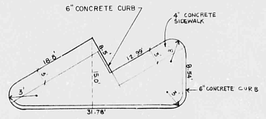
As shown by Plate 31 of 50, of the floodway maps for the City of Albuquerque, this site does not lie within a designated flood hazard zone.

As a requirement of site development plan approval for Market Centre East, of which Builder's Square is a portion, a conceptual drainage plan was submitted and approved (REF: K21-D). The plan outlined the drainage criteria for the Builder's Square Project. According to the plan, Builder's Square and the adjacent undeveloped Parcel would continue to drain to the existing 48-inch culvert. The Tomasita Elementary School would be required to discontinue draining westward across private lands and discharge into the I-40 channel which is adjacent to APS property at this location. The APS diversion would be required due to restricted capacity at the 48-inch culvert.

As shown by the plan, all onsite stormwater is routed overland via swales and rundowns to the existing 48-inch culvert. Erosion protection is provided at each rundown and at the culvert entrance. An earthen berm shall be provided just West of the culvert to help develop the headwater required to push floodwaters through the pipe. At this phase of the Market Centre Project, APS will be allowed to drain across Tract 4-C2 as downstream capacity exists to drain undeveloped flows. An earthen berm will be constucted along the East boundary of Builder's Square to divert the undeveloped flows South into I-40 right-of-way, thereby preventing the introduction of sediment onto the project site. An existing swale will carry offsite flows to the 48-inch culvert.

Temporary erosion control measures will be required during the construction period to prohibit the release of sediment downstream. A ditch-dike system shall be employed as detailed on sheet C-3. This system shall remain in place until paving operations are completed.

Drainage calculations for the project are submitted seperately but concurrent with this plan. The calculations analyze the existing and developed conditions for the 100 year and 10 year - 6 hour duration storm events. The calculations are prepared as outlined in the Development Process Manual, Volume II, Chapter 22. Calculations are available upon request.



TYPICAL PARKING ISLAND GEOMETRY

SCALE: 1" = 10'

ESPEY, HUSTON AND ASSOC. INC.
ENGINEERING & ENVIRONMENTAL CONSULTANTS
317 COMMERCIAL ST. N.E.
ALBUQUERQUE, NEW MEXICO 87102
PHONE: (505) 242-1809

RECEIVED 1 9 1987 HYDROLOGY SECTION

job title		
BUILDERS SQUARE		
PROJECT COORDINATOR: KEITH C. TITSWORTH JR.	job no 7352	date 12-86
sheet title DRAINAGE & PAVING DETAILS C3	by D.A.L.	

delatorre · hannart pa
architects
two woodward center 700 lomas ne · suite 200
albuquerque, nm 87102 · 505 842 9500

sheet C-3 of 25

CITY OF ALBUQUERQUE
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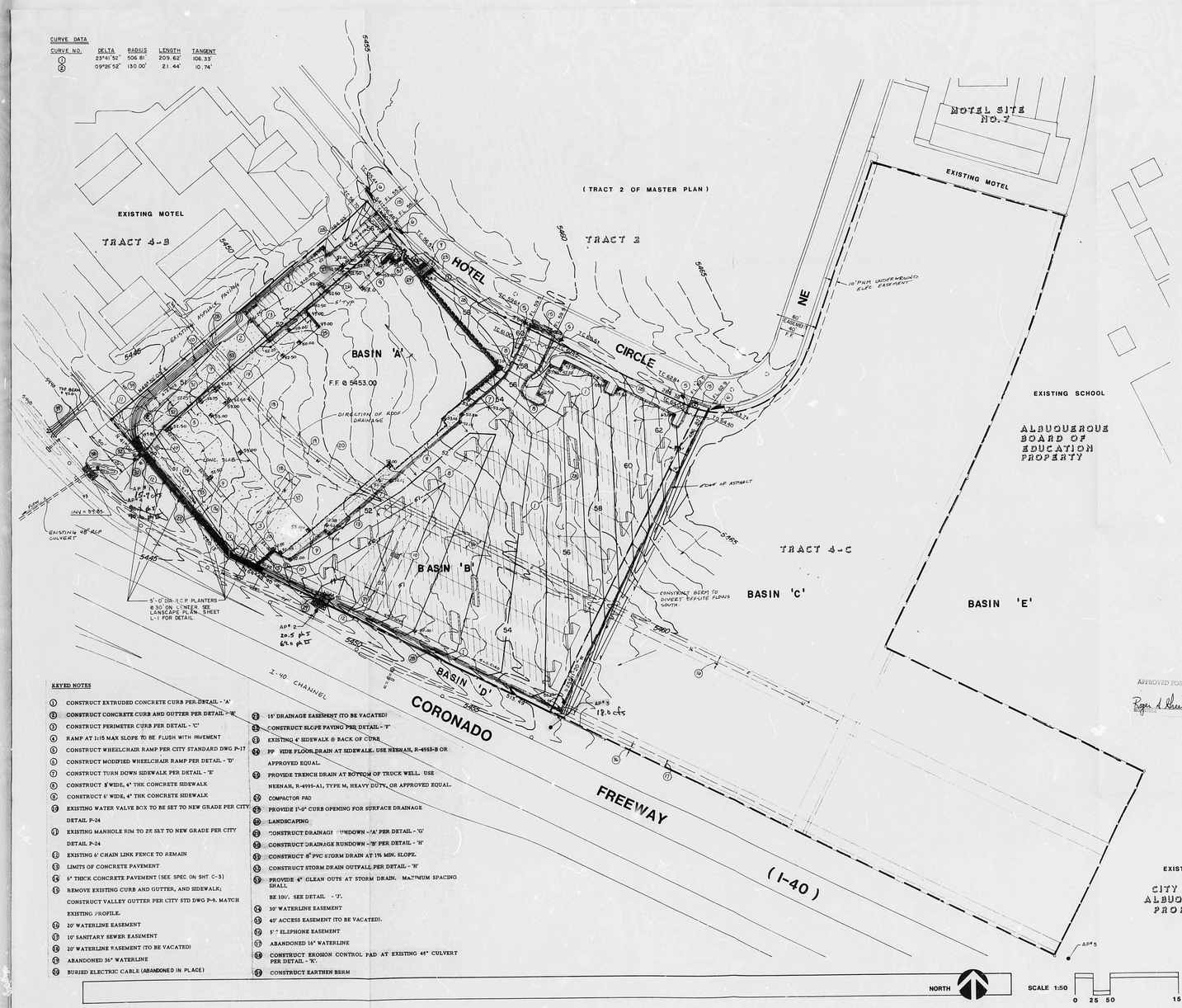
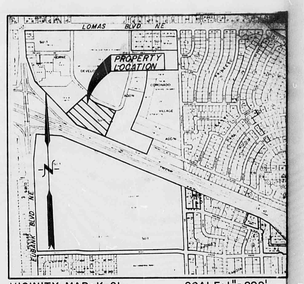
CURVE DATA

CURVE NO.	DELTA	RADIUS	LENGTH	TANGENT
1	23°41'53"	506.81'	209.62'	106.33'
2	09°26'52"	130.00'	21.44'	10.74'




TOMAS BLVD NE
PROPERTY LOCATION
COMMERCIAL
VILLAGE
CENTRAL AVE NE
COMMERCIAL
VILLAGE
COMMERCIAL
VILLAGE
COMMERCIAL
VILLAG