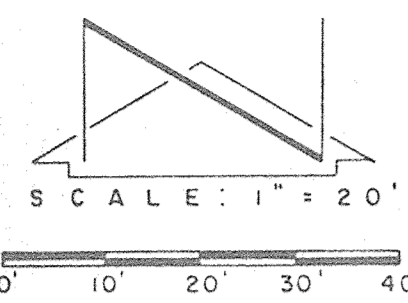


VICINITY MAP G-20  
SCALE: 1" = 80'



**PROJECT BENCHMARK**  
A STANDARD 6" CS DRESS CAP STAMPED "M-1A/1975" SET IN A CONCRETE NOB IN THE EAST MEDIAN LOCATED 300' EAST OF THE CENTERLINE OF EUBANK BLVD. N.E. & 73' SOUTH OF THE NORTHERLY MEDIAN CURB ON MONTGOMERY BLVD. N.E.  
ELEVATION = 5537.10 FEET (MSLD)

**T.I.M.**  
TOP OF CURB @ THE SOUTHEAST PROPERTY CORNER OF SITE AS SHOWN.  
ELEVATION = 5522.67 FEET (MSLD)

**LEGAL DESCRIPTION**  
TRACT D, SIERRA VISTA SHOPPING CENTER (NOW LOTS B-1, B-2 AND B-3)

The following items concerning the Carol Rickert Office Building Drainage Plan are contained herein:  
1. Vicinity Map 2. Grading Plan 3. Calculations

As shown by the Vicinity Map, the site is located at the southwest corner of the intersection of Sierra Vista Court N.E. and Eubank Boulevard N.E. The proposed office building is the last remaining pad site within this three-lot commercial development.

As shown by Panel 143 of 825 of the National Flood Insurance Program Flood Insurance Rate Maps published by F.E.M.A. for the County of Bernalillo, New Mexico, and Incorporated Areas, dated September 20, 1996, this site does not lie within a designated flood hazard zone. Runoff generated by this site flows to Sierra Vista Court N.E. which drains west to an existing drainage runoff located at the north end of the existing cul-de-sac. From this point, runoff flows in an existing public drainage channel which is the outfall for this site. The free discharge of runoff from this site has been established by previous submittals (G20/D2A).

The Grading Plan shows: 1) existing and proposed grade 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 indicated by this Plan, the majority of the site is developed. All that remains is the building pad site for this project and the landscaping in the area that surrounds the existing paving. All of the paving, as shown, is existing with the exception of the minor infill noted. For the most part, the existing paving drains to Sierra Vista Court via the existing driveway. A small portion of the paved parking was constructed as a low point. The runoff collecting at that low point discharges via two 3" diameter curb openings. From this point, it is proposed to direct this discharge through the new landscaping to a new sidewalk culvert (SO #19). The majority of the runoff generated by the site, however, discharges to the street via the existing driveway. As shown by this Plan, the proposed drainage pattern is consistent with the existing drainage scheme for the overall site. This project represents a modification to an existing site within an infill area.

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 indicated by these Calculations, a minor increase in runoff is anticipated due to the proposed construction. As indicated above, the free discharge of runoff from this site is consistent with previously approved plans and the existing drainage pattern of the site. Furthermore, this is a modification to an existing site within an infill area and the increase in runoff is minor. Lastly, the Floodplain Maps do not indicate downstream flood hazards with which to be concerned.

Offsite flows enter this lot from the two upstream properties. This is consistent with the previously approved plan. Those existing flows, as identified on previously approved plans, will continue to be accepted conveyed through the site, and discharged to Sierra Vista Court N.E. No other offsite flows affect this project as demonstrated by the previous submittals.

DRAINAGE PLAN

△ CALCULATIONS

Site Characteristics

- Precipitation Zone = 3
- $P_{100} = P_{60} = 2.60$  in.
- Total Area ( $A_p$ ) = 56,250 sq ft; 1.29 ac.

4. Existing Land Treatment

Treatment	Area (sq/acre)	%
B	10,280; 0.24	19
C	11,170; 0.26	20
D	34,800; 0.79	61

5. Developed Land Treatment

Treatment	Area (sq/acre)	%
B	19,440; 0.45	35
D	36,810; 0.84	65

Existing Condition

1. Volume

$$E_w = (E_{pA} + E_{pA_1} + E_{pA_2} + E_{pA_3}) / A_p$$

$$E_w = [(0.92)(0.24) + (1.29)(0.26) + (2.36)(0.79)] / 1.29 = 1.9 \text{ in.}$$

$$V_{100} = (E_w / 12) A_p$$

$$V_{100} = (1.9 / 12) 1.29 = 0.2017 \text{ ac.ft.}; 8,790 \text{ cf}$$

2. Peak Discharge

$$Q_p = Q_{pA_1} + Q_{pA_2} + Q_{pA_3} + Q_{pA_4}$$

$$Q_p = Q_{100} = (2.60)(0.24) + (3.45)(0.26) + (5.02)(0.79) = 5.5 \text{ cfs}$$

Developed Condition

1. Volume

$$E_w = (E_{pA} + E_{pA_1} + E_{pA_2} + E_{pA_3}) / A_p$$

$$E_w = [(0.92)(0.45) + (2.36)(0.84)] / 1.29 = 1.9 \text{ in.}$$

$$V_{100} = (E_w / 12) A_p$$

$$V_{100} = (1.9 / 12) 1.29 = 0.2017 \text{ ac.ft.}; 8,790 \text{ cf}$$

2. Peak Discharge

$$Q_p = Q_{pA_1} + Q_{pA_2} + Q_{pA_3} + Q_{pA_4}$$

$$Q_p = Q_{100} = (2.60)(0.45) + (5.02)(0.84) = 5.4 \text{ cfs}$$

Comparison

- $\Delta V_{100} = \text{No Change}$
- $\Delta Q_{100} = 5.5 - 5.4 = 0.1 \text{ cfs (decrease)}$

- LEGEND**
- EXISTING SPOT ELEVATION
  - PROPOSED SPOT ELEVATION
  - EXISTING CONTOUR
  - PROPOSED CONTOUR
  - PROPOSED ASPHALT
  - PROPOSED CONCRETE
  - PROPOSED WALL
  - SWALE

CONSTRUCT 1'-12" SIDEWALK CULVERT PER C.O.A. 87B, DING, 22-30 INV. @ 50.0

CONSTRUCT 1' CURB OPENING

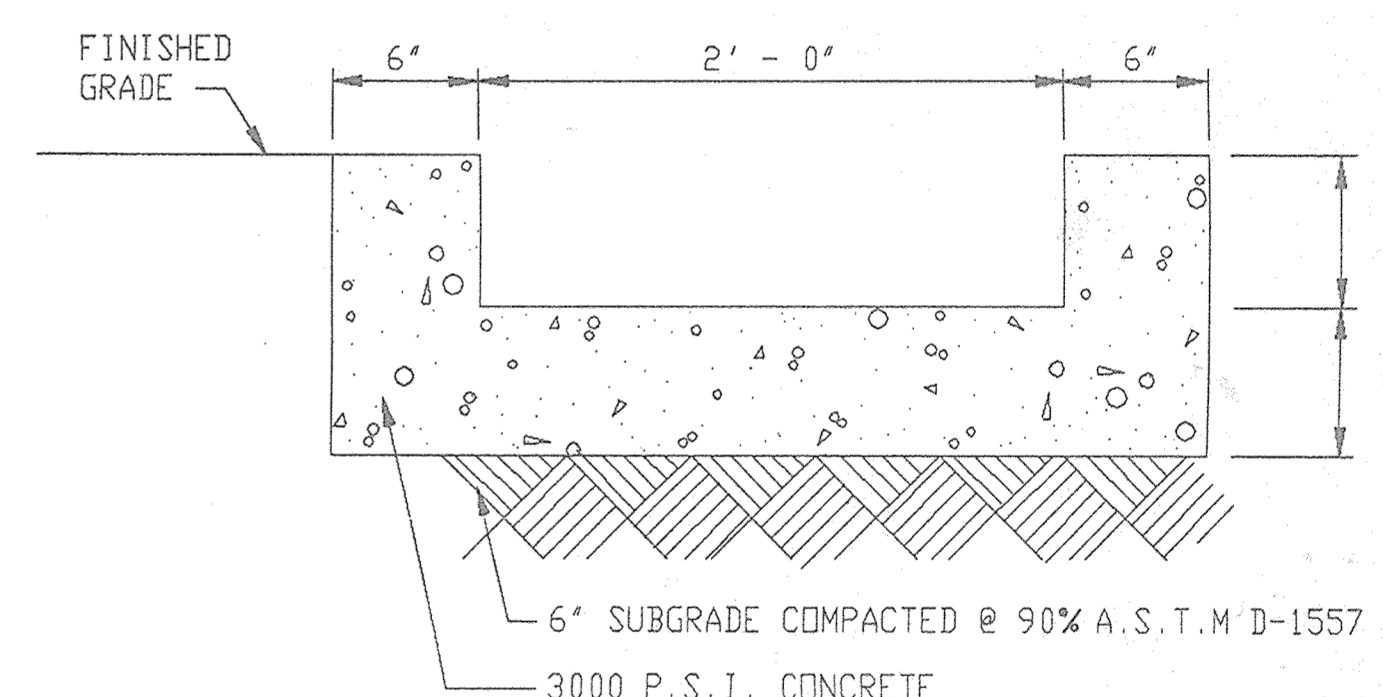
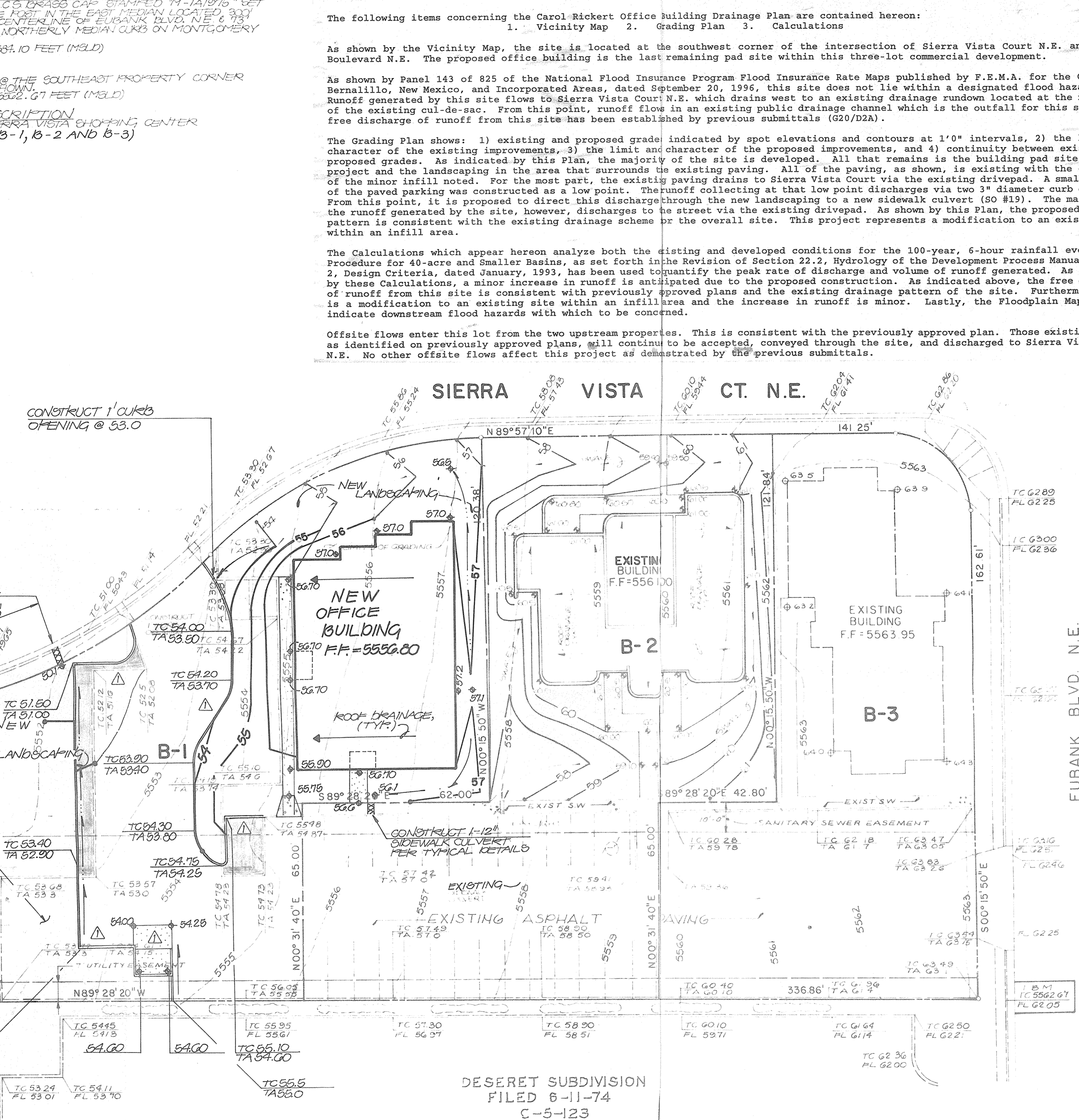
LOT 1 SIERRA VISTA TOWNHOUSE FILED 8-2-82 C-20-5

REMOVE & REPOSE OF EXISTING ASPHALT PAVING

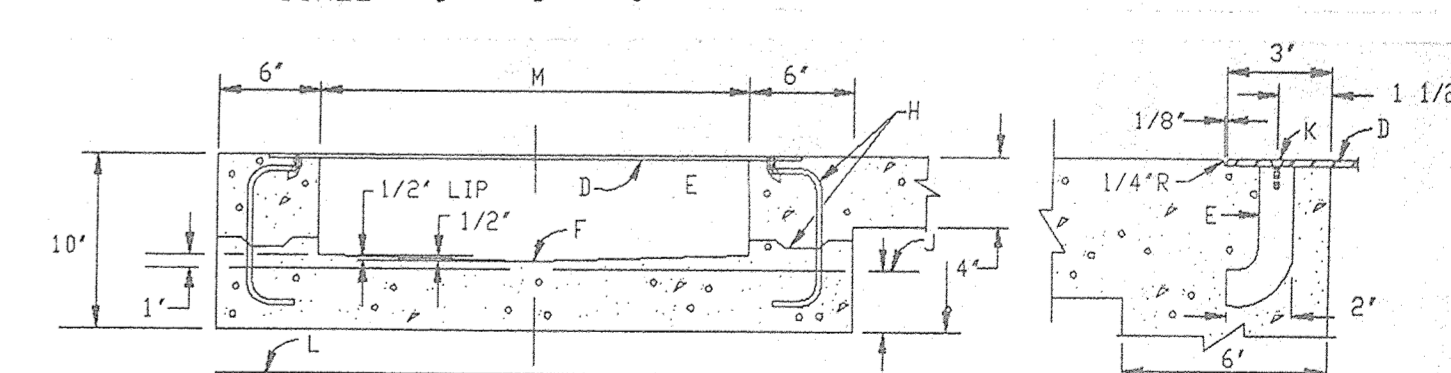
CONSTRUCTION NOTES:

- Two (2) working days prior to any excavation, contractor must contact New Mexico Call System: 266-5966 x 1-800-321-ALERTS 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 the 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 a 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 utility lines, 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.
- An Excavation/Construction Permit will be required before beginning any work within City right-of-way. An approved copy of these plans must be submitted at the time of application for this permit.
- Backfill compaction shall be according to residential street use.
- Maintenance of these facilities shall be the responsibility of the owner of the property served.
- 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. This can be achieved by constructing temporary berms at the property lines and setting the soil to keep it from blowing.
  - 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.



TYPICAL RUN-DOWN SECTION  
SCALE: 1" = 1'-0"

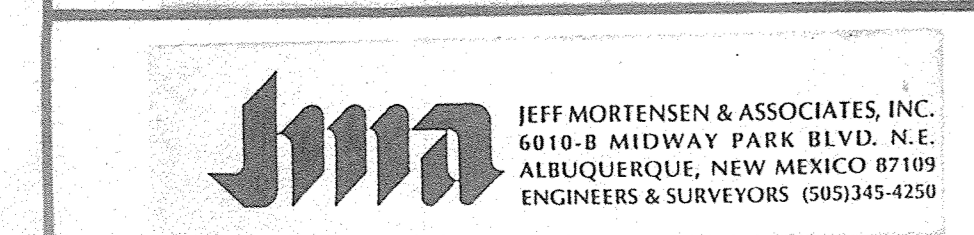


TYPICAL SIDEWALK CULVERT DETAILS  
NOT TO SCALE



09-04-97

GRADING & DRAINAGE PLAN  
CAROL RICKERT OFFICE BUILDING



NO.	DATE	BY	REVISIONS
1	8/20	J.M.	REVISE PARKING LOT CONFIGURATION & CALCULATIONS.

DESIGNED BY	APPROVALS	NAME	DATE
J.G.M.	ACE/DESIGN		
J.M.A.	INSPECTOR		
J.G.M.	ACE/FIELD		

60663  
05-97