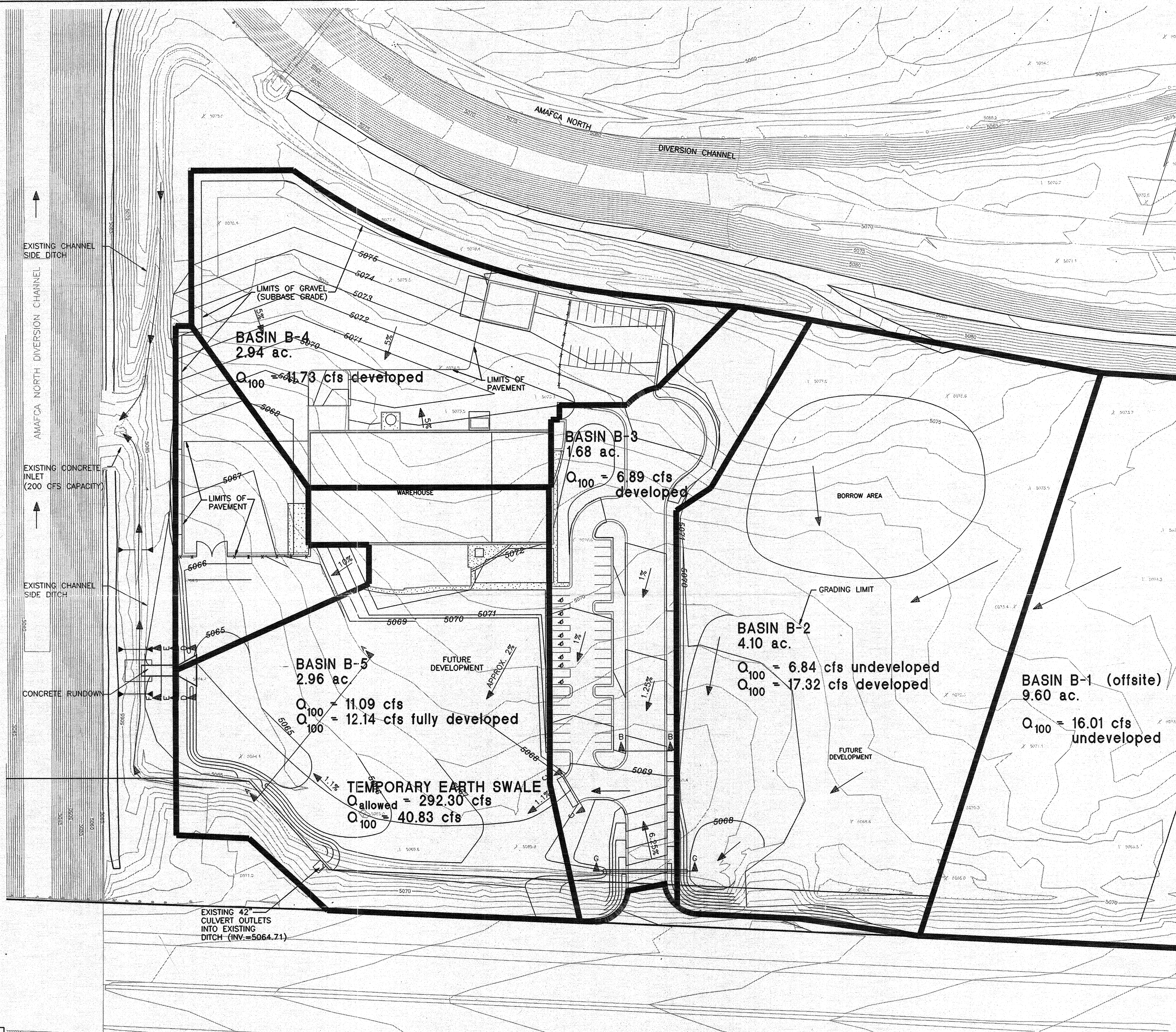
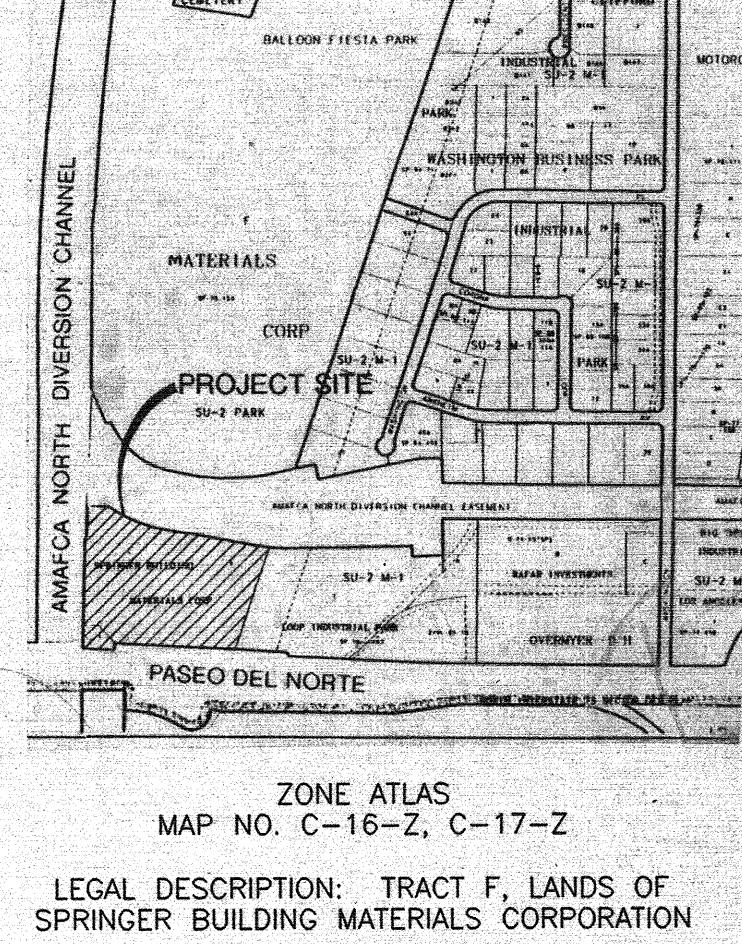


DATE: 10/10/97
SCALE: 1" = 50'
DRAWN BY: J. SWALLEY
FILE NAME: C-1a



- LEGEND**
- PROPERTY LINE
 - EXISTING CONTOUR
 - SWALE/SIDE DITCH
 - EXISTING SPOT ELEVATION
 - EXISTING EASEMENT
 - DRAINAGE BASIN BOUNDARY
 - DIRECTION OF FLOW
 - Q_{100} EXPECTED FLOWS GENERATED BY THE 100-YEAR DESIGN STORM
 - $Q_{allowed}$ FLOW CAPACITY



HYDROLOGY OVERVIEW

INTRODUCTION:
THIS PLAN PRESENTS A DRAINAGE MANAGEMENT SCHEME FOR THE PROPOSED DEVELOPMENT OF THE OFFICE/WAREHOUSE BUILDING AND ASSOCIATED IMPROVEMENTS ON TRACT F, LANDS OF SPRINGER BUILDING MATERIALS CORP. PROPERTY LOCATED NORTH OF THE PASEO DEL NORTE FRONTAGE ROAD AND EAST OF THE NORTH DIVERSION CHANNEL. IT IS NOT LOCATED WITHIN A FLOODPLAIN. THIS PLAN IS SUBMITTED FOR HYDROLOGY DIVISION REVIEW, FOR THE PURPOSE OF OBTAINING A BUILDING PERMIT.

EXISTING CONDITIONS:
THE UNDERLYING CONTOURS SHOWN ON THIS SHEET DEPICT THE EXISTING TOPOGRAPHIC CONDITIONS OF THE SITE. THE SITE GENERALLY SLOPES FROM THE NORTHEAST TO THE SOUTHWEST. THE TERRAIN IS RELATIVELY STEEP AT THE NORTHEAST AND NORTHWEST CORNERS, WITH SLOPES OF UP TO 8%. MOST OF THE SITE HAS RELATIVELY GENTLE SLOPES OF .5% TO 3%. ONSITE DRAINAGE CURRENTLY SHEET FLOWS ACROSS THE SITE TO THE WEST SIDE WHERE THEY ARE COLLECTED BY A CHANNEL SIDE DITCH. OFFSITE FLOW FROM BASIN B-1 ALSO FLOWS ACROSS THE SITE AND INTO THE SIDE DITCH. THE DITCH DIVERTS THIS COLLECTED FLOW INTO THE NORTH DIVERSION CHANNEL VIA A CONCRETE INLET (APPROXIMATELY 200 CFS CAPACITY).

PROPOSED CONDITIONS:
THE PROPOSED DEVELOPMENT INDICATED ON THIS SHEET (PHASE I) ONE STORY OFFICE/WAREHOUSE BUILDING AND ASSOCIATED PAVED PARKING, ACCESS STREETS, AND LANDSCAPING. ANTICIPATED FUTURE DEVELOPMENT NOT SHOWN ON THIS SHEET INCLUDES A 30,000 SQ. FT OFFICE BUILDING SOUTH OF THE PROPOSED OFFICE/WAREHOUSE BUILDING (PHASE II) AND AS MANY AS THREE SMALLER OFFICE/WAREHOUSE BUILDINGS ON THE EAST SIDE OF THE SITE (PHASE III).

GENERATED SURFACE FLOWS WILL BE COLLECTED AT THE LOW POINT OF THE SITE (THE SOUTHWEST CORNER) AND DIVERTED TO THE CHANNEL SIDE DITCH VIA A SINGLE CONCRETE RUNDOWN. GENERATED FLOW FROM BASIN B-3 WILL BE COLLECTED AND TRANSPORTED VIA THE PAVED STREET AND PARKING AREA TO A TEMPORARY EARTH SWALE IN BASIN B-5. UNDEVELOPED OFFSITE AND ONSITE FLOWS GENERATED FROM BASINS B-1 AND B-2 WILL SHEET FLOW TO A COLLECTION POINT EAST OF THE CUL-DE-SAC STREET, WHERE IT IS DIVERTED TO THE TEMPORARY SWALE VIA A 43"x27" CORRUGATED METAL PIPE ARCH CULVERT. GENERATED FLOW FROM BASIN B-5 ALSO SHEET FLOWS INTO THE TEMPORARY SWALE. BASIN B-4 SHEET FLOWS TO THE LOW POINT IN BASIN B-5.

THE TEMPORARY SWALE TRANSPORTS THE GENERATED ONSITE AND OFFSITE FLOW TO A CONCRETE RUNDOWN, WHERE IT IS DIVERTED INTO THE EXISTING CHANNEL SIDE DITCH. THE TEMPORARY SWALE IS SIZED FOR THE 100-YEAR DESIGN STORM GENERATED FLOW FOR PHASE I ONLY (40.83 CFS ON THE SOUTH SECTION). PHASE II WILL INCLUDE THE CONSTRUCTION OF AN ACCESS STREET ALONG THE SWALE PATH THAT WILL CARRY GENERATED FLOWS.

THE CONCRETE RUNDOWN AND THE CUL-DE-SAC STREET, HOWEVER, ARE PERMANENT. THE STREET, RUNDOWN, AND DETENTION AREA ARE SIZED FOR THE 100-YEAR DESIGN STORM GENERATED FLOW FOR THE FULLY DEVELOPED SITE, OR PHASES I THROUGH III. THE CONCRETE RUNDOWN CAPACITY IS 64.40 CFS.

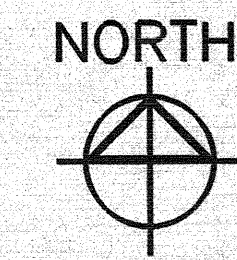
NOTE THAT ONLY UNDEVELOPED FLOWS WERE CONSIDERED FOR THE OFFSITE BASIN. IT IS ANTICIPATED THAT GENERATED FLOWS FROM FUTURE DEVELOPMENT OF PARCELS IN BASIN B-1 WILL BE DIVERTED TO THE EXISTING CULVERT ON THE NORTH SIDE OF THE PASEO DEL NORTE FRONTAGE ROAD OR TO THE CHANNEL ON THE NORTH SIDE OF THE PROPERTY.

CONCLUSION:
CALCULATIONS TO SUPPORT THIS DRAINAGE PLAN ARE ENCLOSED WITH THIS SUBMITTAL. WE ARE REQUESTING APPROVAL OF THIS DRAINAGE PLAN FOR THE PURPOSE OF BUILDING PERMIT APPROVAL. WE BELIEVE THE INFORMATION PRESENTED HEREIN AND IN THE SUPPORTING DOCUMENT CALCULATIONS IS ACCURATE AND PROVIDES FOR SAFE PASSAGE OF THE 100 YEAR STORM EVENT.

GENERAL NOTE

SECTIONS A-G ARE SHOWN ON THE CALCULATION SHEETS.

DRAINAGE PLAN AND BASIN MAP
SCALE: 1" = 50'



Professional Engineer Seal: JAMES A. TOPMILLER, NEW MEXICO, 1954.

Signature: J. Swalley, 10/22/97

Bohannon & Huston

County of One, 7500 REFERENCE, NEW MEXICO, 87109

Stamp: ENGINEERS PLANNERS ARCHITECTS, 1761 OCT 23 1997

OFFICE / WAREHOUSE for BRADBURY STAMM
PASEO del NORTE
ALBUQUERQUE, NEW MEXICO

Project no. 9627
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