Drainage calculations

A. SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2, DESIGN CRITERIA FOR THE CITY OF ALBUQUERQUE, NEW MEXICO IN COOPERATION WITH BERNALILLO COUNTY, NEW MEXICO AND THE ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY. B. FLOODWAY, FLOOD BOUNDARY AND FLOODWAY MAP. CITY OF

ALBUQUERQUE, NEW MEXICO, PANEL 23 OF 50. C. ZONE ATLAS PAGE G-16-Z.

II. GENERAL INFORMATION:

IMPERVIOUS

IMPERVIOUS

A. SITE LIES IN ZONE TWO(2) (SEE REF. A, PAGE A-1) B. 100 YEAR, 6 HOUR RAINFALL CRITERIA C. TIME OF CONCENTRATION, Tc; Tc = 0.2 hr(12 MINUTES).

III.IMPERVIOUSNESS: TREATMENT TYPES OF SURFACES UNDEVELOPED

0.0000 LANDSCAPING 1,558 0.0358 COMPACTED/VACANT 15,574 0.3575 14,074 0.3231 5,405 0.1241 6,905 0.1585 TOTAL AREA (TA) 22,537 0.5174 22,537 0.5174

0.39

IV. PEAK DISCHARGE 100 YEAR (REF. A, TABLE A-9): TREATMENT TYPES OF EXISTING CFS/Ac Qp(100) CFS/Ac Qp(100) 1.59 0.00 1.59 0.00 SURFACES UNDEVELOPED LANDSCAPING 2.28 2.28 COMPACTED/VACANT 3.14

PEAK DISCHARGE FROM SITE 1,79 CFS V. PEAR DISCHARGE 10 YEAR (REF. A, TABLE A-9): TREATMENT TYPES OF SURFACES CFS/Ac Qp(10) CFS/Ac Qp(10) UNDEVELOPED LANDSCAPING 0.95 COMPACTED/VACANT 1.71 IMPER. OUS

4.70

3.14

1.03 CFS VI. WEIGHTED "E" 100 YEAR, 6 HR. (REF. A, TABLE A-8): TYPES OF TREATMENT EXISTING SURFACES E ExA/TA UNDEVELOPED 0.78 LANDSCAPING 0.78 **0**.05 COMPACTED/VACANT 1.13 0.78 1.13 C.71 IMPERVIOUS 2.12

V!. VOLUME 100 YEAR, V(360) (REF. A, TABLE A-8): EXIST!NG

WEIGHTED "E" FACTOR

PLAK DISCHARGE FROM SITE

1.34 x 0.7154/12 0.06 AC. FT. 2,523 CU.FT 1.41 x 0.7154/12 0.06 AC. FT.

EROSION CONTROL MEASURES.

THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT OF STORM RUNOFF DURING CONSTRUCTION; HE SHALL INSURE THAT THE FOLLOWING MEASURES ARE TAKEN:

- ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY CONSTRUCTION OF BERMS, DIKES, SWALES, PONDS AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUNOFF TO LEAVE THE SITE AND ENTERING ADJACENT PROPERTY.

- ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUNOFF FROM THE SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER THE PUBLIC

- THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY OR ALL SEDIMENT WITHIN THE PUBLIC STREETS THAT HAVE BEEN ERODED FROM THE SITE AND DEPOSITED THERE.

NOTE TO CONTRACTOR

- 1. An excavation/construction permit will be required before beginning any work within the City right-of-way. Approved copy of this plan must be submitted at the time of application for permit.
- 2. All work detailed in this plan to be performed, except as otherwise stated or provided hereon, shall be constructed in accordance with City of Albuquerque Standard Specification for Public Works Construction.
- 3. Two working days prior to any excavation, contractor must contact line locating Services at (505) 260-1990 for locating existing utilities.
- 4. Prior to construction, the contractor shall excavate and verify the horizonal and vertical location of all construction. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.

GRADING & DRAINAGE PLAN

5. Backfill compaction shall be according to arterial street use.

General notes.

A. 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.

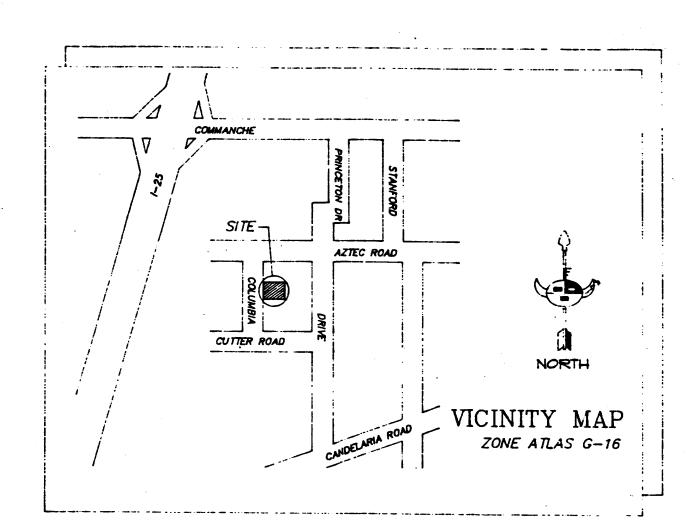
LEGAL DESCRIPTION.

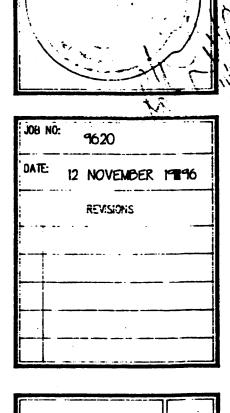
Let 2, Unit 5,

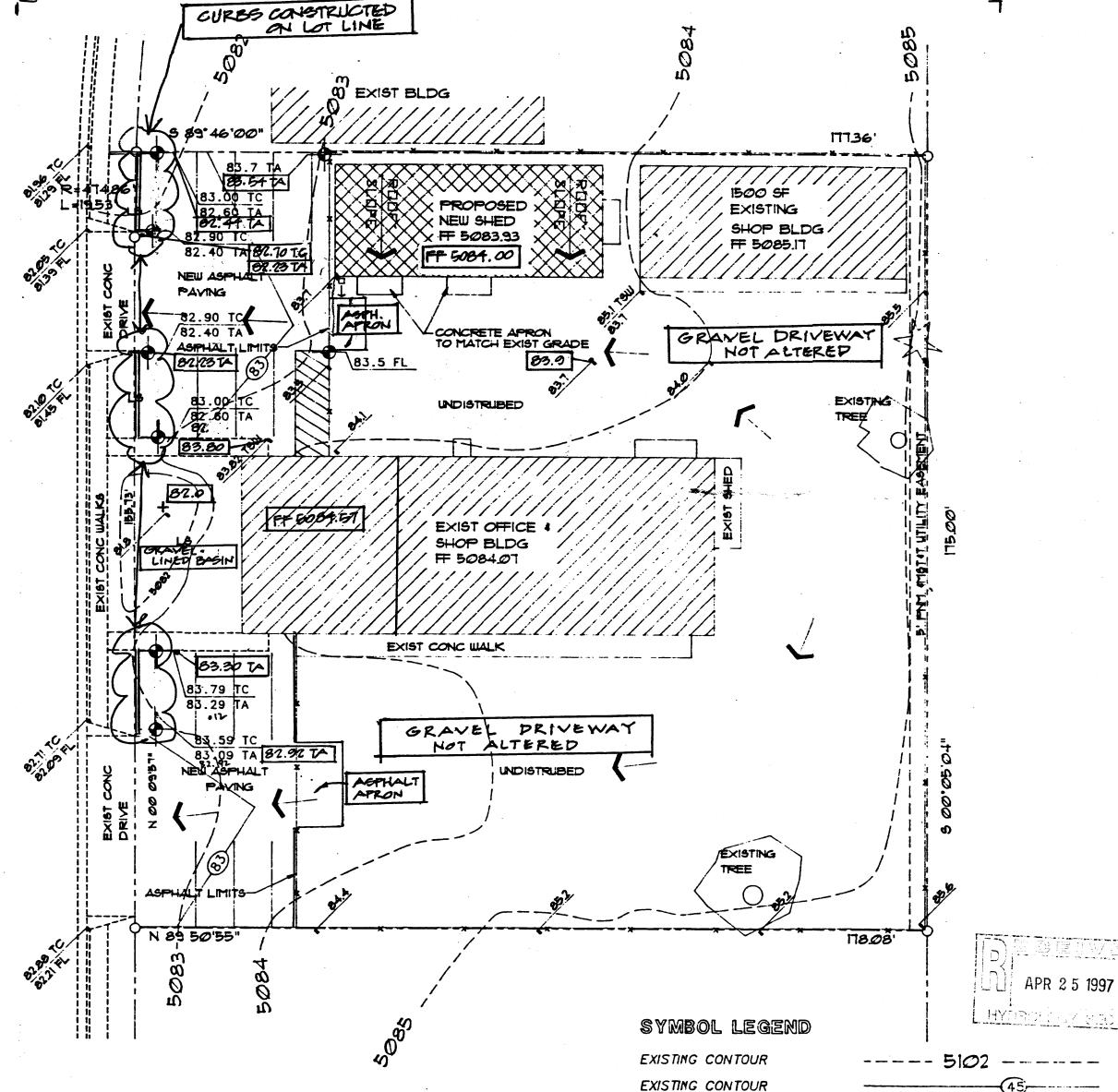
Cutter Industrial Park, Albuquerque, Bernalillo County, New Mexico

BENCH-MARK INFORMATION

TEMPORARY BENCH-MARK BEING THE TOP OF EXISTING FINISHED FLOOR ELEVATION BEARS ELEVATION 5083.93 REFERENCE TO CITY BENCH-MARK 8A-HIG, BEARING ELEVATION 508832(MSL)







ABBREVIATION LEGEND ON APRIL 9, 1997, THIS SITE WAS INSPECTED AND WAS FOUND TO BE IN SUBSTANTIAL COMPLIANCE WITH FLOWLINE THE DESIGNED AND APPROVED DRAINAGE PLAN. BOXES RICHARD V. HALL N.M.P.E. No.7918

TOP OF CURB - TC TOP OF ASPHALT - TA – FL TOP OF CONC. PAD- TCP FOP ON SIDE WALK - JSW AS BUILT CONDITIONS & SPOT ELEVATIONS SHOWN IN

SCALE: 1"=20.0'

DESIGNED SPOT ELEVATION PROPERTY LINE EASEMENT LINE FLOW DIRECTION EXISTING SPOT ELEVATION EXISTING CHAINLINK FENCE PROPCSED DOWNSPOUT ----x ----x ---

ACCESSIBLE ROUTE THE ACCESSIBLE ROUTE IS A PATH CONNECTING ALL ACCESSIBLE ELEMENTS AND SPACES WITHIN A SITE, BUILDING OR FACILITY THAT IS USABLE BY PERSONS WITH PHYSICAL DISABILITIES. IN THIS FACILITY THE ACCESSIBLE ROUTE CONSISTS OF WALKING SURFACES WITH A SLOPE NOT STEEPER THAN 1:20, RAMPS WITH A SLOPE NOT STEEPER THAN 1:12. HC PARKING SPACES AND ACCESS AISLES WITH A SLOPE NOT GREATER THAN 1:48 IN ANY DIRECTION AND CLEAR FLOOR SPACE FOR ACCESSIBLE ELEMENTS. CROSS SLOPES SHALL NOT EXCEED 1:48.

DRAINAGE CALCULATIONS A. SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2, DESIGN CRITERIA FOR THE CITY OF ALBUQUERQUE, NEW MEXICO IN COOPERATION WITH BERNALILLO COUNTY, NEW MEXICO AND THE ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY. B. FLOODWAY, FLOOD BOUNDARY AND FLOODWAY MAP, CITY OF ALBUQUERQUE, NEW MEXICO, PANEL 23 OF 50. C. ZONE ATLAS PAGE G-16-Z. II. GENERAL INFORMATION: A. SITE LIES IN ZONE TWO(2) (SEE REF. A, PAGE A-1) B. 100 YEAR, 6 HOUR RAINFALL CRITERIA C. TIME OF CONCENTRATION, Tc; Tc = 0.2 hr(12 MINUTES) III.IMPERVIOUSNESS: TREATMENT TYPES OF EXISTING TYPE SURFACES SQ.FT ACRES SQ.FT ACRES 0.0000 B LANDSCAPING 1,558 0.0358 1,558 0.0358 C COMPACTED/VACANT 15,574 0.3575 14,074 0.3231 D IMPERVIOUS 5,405 0.1241 6,905 0.1585 TOTAL AREA (TA) 22,537 0.5174 22,537 0.5174 IV. PEAK DISCHARGE 100 YEAR (REF. A, TABLE A-9): TREATMENT TYPES OF EXISTING SURFACES CFS/Ac Qp(100) CFS/Ac Qp(100 C COMPACTED/VACANT 3.14 1.12 3.14 1.01 PEAK DISCHARGE FROM SITE 1.79 CFS V. PEAK DISCHARGE 10 YEAR (REF. A, TABLE A-9): TREATMENT TYPES OF EXISTING TYPE SURFACES CFS/Ac Qp(10) CFS/Ac Qp(10) A UNDEVELOPED D IMPERVIOUS 3.14 0.39 3.14 0.50 PEAK DISCHARGE FROM SITE 1.03 CFS VI. WEIGHTED "E" 100 YEAR, 6 HR. (REF. A, TABLE A-8): TREATMENT TYPES OF E EXA/TA E EXA/TA A UNDEVELOPED COMPACTED/VACANT 1.13 0.78 1.13 0.7 IMPERVIOUS VI. VOLUME 100 YEAR, V(360) (REF. A, TABLE A-8): EXISTING 1.34 x 0.7154/12 0.06 AC. FT. 2,523 CU.FT 1.41 x 0.7154/12 0.06 AC. FT. 2,646 CU.FT EROSION CONTROL MEASURES: THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT OF STORM RUNOFF DURING CONSTRUCTION; HE SHALL INSURE THAT THE FOLLOWING MEASURES ARE TAKEN: ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY CONSTRUCTION OF BERMS, DIKES, SWALES, PONDS AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUNOFF T LEAVE THE SITE AND ENTERING ADJACENT PROPERTY. ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT AL TIMES FROM STORM WATER RUNOFF FROM THE SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER THE PUBLIC THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY OR ALL SEDIMENT WITHIN THE PUBLIC STREETS THAT HAVE BEEN ERODED FROM THE SITE AND DEPOSITED THERE. NOTE TO CONTRACTOR 1. An excavation/construction permit will be required before beginning any work within the City right-of-way. Approved copy of this plan must be submitted at the time of application for permit. 2. All work detailed in this plan to be performed, except as otherwise stated or provided hereon, shall be constructed in accordance with City of Albuquerque Standard Specification for Public Works Construction. 3. Two working days prior to any excavation, contractor must contact line locating Services at (505) 260-1990 for locating existing utilities. 4. Prior to construction, the contractor shall excavate and verify the horizonal and vertical location of all construction. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay. 5. Backfill compaction shall be according to arterial street use.

GENERAL NOTES:

SAFETY AND HEALTH.

A. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN

ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL

LAWS, RULES, AND REGULATIONS CONCERNING CONSTRUCTION

LEGAL DESCRIPTION: Lot 2, Unit 5, Cutter Industrial Park, Albuquerque, Bernalillo County, New Mexico JOB NO: 9620 AZTEC ROAD BENCH-MARK INFORMATION DATE: 12 NOVEMBER 1996 TEMPORARY BENCH-MARK BEING THE TOP OF EXISTING REVISIONS FINISHED FLOOR ELEVATION BEARS ELEVATION 5083.93 REFERENCE TO CITY BENCH-MARK 8A-HI6, BEARING NORTH ELEVATION 5088.32(MSL) VICINITY MAP ZONE ATLAS G-16 5 89° 46'00" 0 R = 474861 1500 SF PROPOSED X EXISTING X NEW SHED XXX SHOP BLDG X FF 5083.93 XXXX FF 5085.17 PAVING /82.40 TA V-CONCRETE APRON ASPHALT, LIMITS TO MATCH EXIST GRADE EXISTING UNDISTRUBED TREE EXIST OFFICE 4 SHOP BLDG FF 5084.07 EXIST CONC WALK NEW ASPHALT UNDISTRUBED PAVING EXISTING TREE ASPHALT LIMITS SYMBOL LEGEND EXISTING CONTOUR EXISTING CONTOUR DESIGNED SPOT ELEVATION ABBREVIATION LEGEND PROPERTY LINE TOP OF CURB - TC TOP OF ASPHALT - TA EASEMENT LINE FLOWLINE - FL TOP OF CONC. PAD- TCP LOW DIRECTION TOP OF SIDEWALK - TSW EXISTING SPOT ELEVATION XISTING CHAINLINK FENCE PROPOSED DOWNSPOUT SHEET NO. GRADING & DRAINAGE PLAN SCALE: 1"=20.0' 0 5' 10' NORTH

DEGEOVE

ACCESSIBLE ROUTE THE ACCESSIBLE ROUTE IS A PATH CONNECTING ALL ACCESSIBLE ELEMENTS AND SPACES WITHIN A SITE, BUILDING OR FACILITY THAT IS USABLE BY PERSONS WITH PHYSICAL DISABILITIES. IN THIS FACILITY THE ACCESSIBLE ROUTE CONSISTS OF WALKING SURFACES WITH A SLOPE NOT STEEPER THAN 1:20, RAMPS WITH A SLOPE NOT STEEPER THAN 1:12, HC PARKING SPACES AND ACCESS AISLES WITH A SLOPE NOT GREATER THAN 1:48 IN ANY DIRECTION AND CLEAR FLOOR SPACE FOR ACCESSIBLE ELEMENTS. CROSS SLOPES SHALL NOT EXCEED 1:48.