BENCHMARK

CENTRAL STATION DATA

NM STATE PLANE COORDINATES

LOCATED AT THE INTERSECTION OF

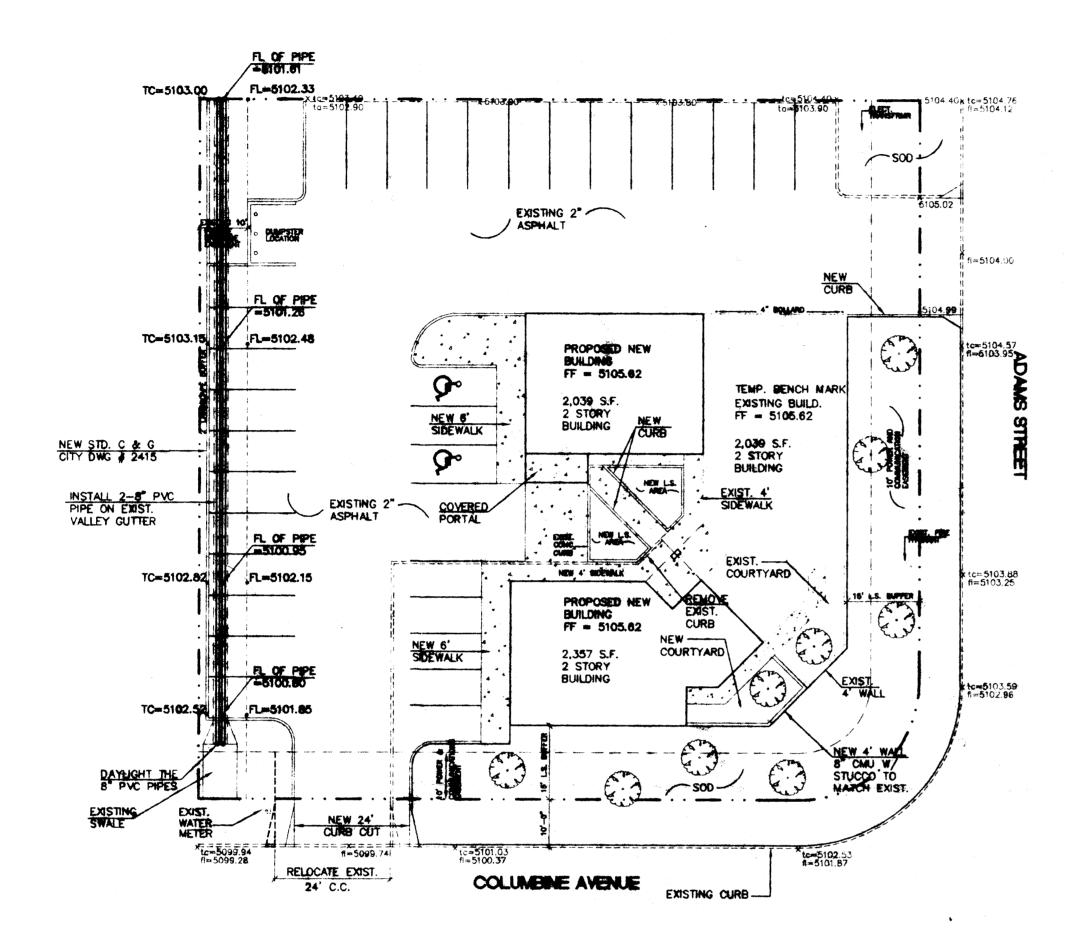
JEFFERSON AND LOS ANGELES, NAIL IN POLE

ACS "6-C17"

CENTRAL ZONE

X=382262.47 Y=1495630.34 G-G=0.99967825 $\Delta = -00'13'35"$

ELEV=5120.26



07-Jul-9**8** Calculations: Total Basin Calculations are based on "Section 22.2 Hydrology of the Development Process Manual, Volume 2, Design Criteria for the City of Albuquerque, New Mexico, January 1993 - basins < 40 acres".

Precipitation Zone = 2Depth at 100-year, 6-hour storm: (Table A-2) P = 2.35 inches

Land Treatments: From Table 5 - Percent Treatment D Single Family Residential = 7*SQR((N*N) + (5*N))where N = units/acreN = -----, ok < 6 N = 0.00Therefore Percent Treatment D = 0.00%(includes local streets)

Areas: (acres) Existing Proposed Treatment A 0.00 0.00 Treatment B 0.00 0.00 Treatment C 0.12 0.12 Treatment D 0.38 0.38 Total (acres) = $0.50 \, 0.50$

Volume 100 year 100 year 10 year 2 year 2 year Existing Proposed Existing Proposed Existing Proposed Volume (acre-feet) = 0.08 0.08 0.05 0.05 0.03 0.03 Volume (cubic feet) = 3,386 3,405 2,055 2,071 1,143 1,155

Total Q(p), cfs: 100 year 100 year 10 year 10 year 2 year 2 year Existing Proposed Existing Proposed Existing Proposed Q(p)*A Q(p)*A Q(p)*A Q(p)*A Q(p)*ATreatment A 0.00 0.00 0.00 0.00 0.00 0.00 Treatment B 0.00 0.00 0.00 0.00 0.00 0.00 Treatment C 0.38 0.36 0.21 0.20 0.07 0.07 Treatment D 1.77 1.79 1.18 1.20 0.70 0.71 Total Q (cfs) = $2.14 \ 2.15 \ 1.39 \ 1.39 \ 0.77 \ 0.78$

Excess Precipitation (E): (Table A-8) 100 yr 10 yr 2 yr Treatment A 0.53 0.13 0.00 Treatment B 0.78 0.28 0.02 Treatment C 1.13 0.52 0.15 Treatment D 2.12 1.34 0.79

100 year 100 year 10 year 10 year 2 year 2 year Existing Proposed Existing Proposed Existing Proposed E*A E*A E*A E*A E*A Treatment A 0.00 0.00 0.00 0.00 0.00 0.00 Treatment B 0.00 0.00 0.00 0.00 0.00 0.00 Treatment C 0.14 0.13 0.06 0.06 0.02 0.02 Treatment D 0.80 0.81 0.50 0.51 0.30 0.30

Weighted E = Total E*A/Total Area

Total 0.93 0.94 0.57 0.57 0.31 0.32

100 year 100 year 10 year 10 year 2 year 2 year Existing Proposed Existing Proposed Existing Proposed Weighted E (inches) = $1.88 \cdot 1.89 \cdot 1.14 \cdot 1.15 \cdot 0.63 \cdot 0.64$ Weighted E (feet) = $0.16 \ 0.16 \ 0.10 \ 0.10 \ 0.05$

Peak Discharge (cfs/acre) = Q(p): (Table A-9) Q(p) Q(p) Q(p)100 year 10 year 2 year Treatment A 1.56 0.38 0.00 Treatment B 2.28 0.95 0.08 Treatment C 3.14 1.71 0.60 Treatment D 4.70 3.14 1.86

RATIONAL METHOD:

Coefficient C: (Table A-11) 100 year 10 year 2 year Treatment A 0.31 0.11 0.00 Treatment B 0.45 0.28 0.04 Treatment C 0.62 0.50 0.29 Treatment D 0.93 0.92 0.91 Peak Intensity (in/hour): (Table A-10) 5.05 3.41 2.04

Q = CIA (cfs): 100 year 100 year 10 year 10 year 2 year 2 year Existing Proposed Existing Proposed Existing Proposed CIA CIA CIA CIA CIA Treatment A 0.00 0.00 0.00 0.00 0.00 0.00 Treatment B 0.00 0.00 0.00 0.00 0.00 0.00 Treatment C 0.38 0.36 0.21 0.20 0.07 0.07 Treatment D 1.76 1.79 1.18 1.20 0.70 0.71

Total Q (cfs) = $2.14 \ 2.15 \ 1.38 \ 1.39 \ 0.77 \ 0.78$

DRAINAGE PLAN

run-off generated.

DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.

2. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT OUT OF EXISTING RIGHT-OF-WAY.

ON SITE.

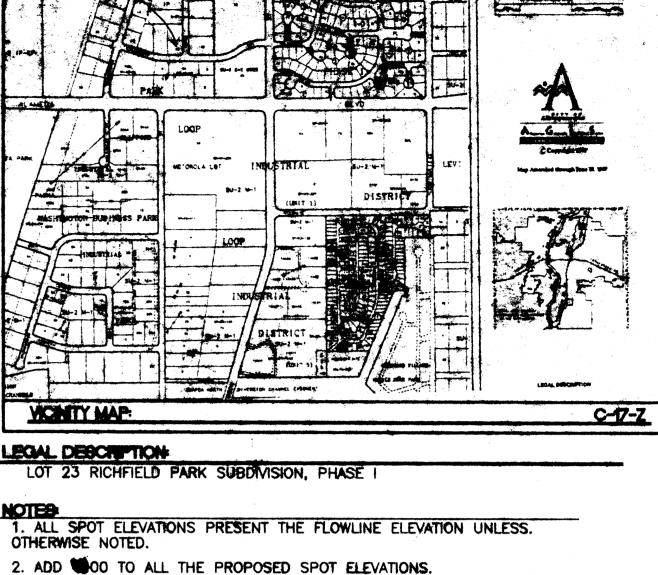
4. REPAIR OF DAMAGED FACILITIES AND CLEAN-UP OF SEDIMENT ACCUMULATION ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.

5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY

GRAPHIC SCALE

SCALE: 1"=20"

20/ACCUTECH-GR.DWG/7-6-98



OTHERWISE NOTED.

PROJECT DATA

PROJECT DESCRIPTION: NEW BUILDING ADDITION TO THE EXISTING OFFICE BUILDING. PROJECT ADDRESS:

8901 ADAMS STREET, NE TOTAL ADDITION: 4,400 S.F.

HYDROLOGY SECTION

EXISTING FENCE EXISTING POWER LINES EXISTING CURB & GUTTER BOUNDARY LINE PROPOSED SIDEWALK PROPOSED GRADE · 4953.70 EXISTING GRADE EXISTING MANHOLE

NOTICE TO CONTRACTORS

1. 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.

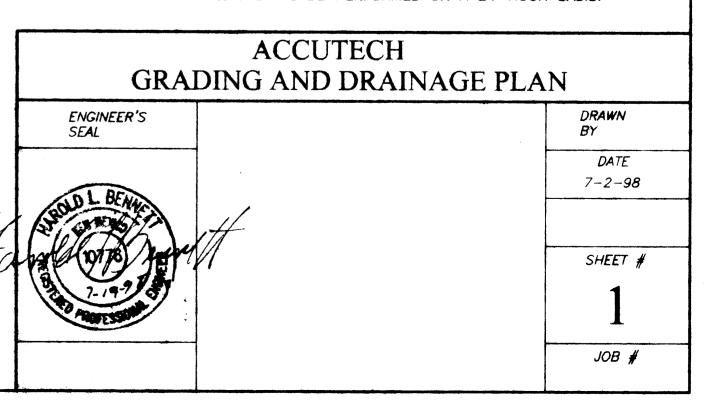
2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.

3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.

4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. 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 RESIDENTIAL STREET USE. 6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.

7. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.



EROSION CONTROL PLAN AND POLLUTION PREVENTION NOTES

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL

3. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL STORM RUN OFF

The following items concerning Lot 23 Richfield Park Subdivision Drainage Plan.

The proposed drainage plan as shown by the vicinity map, is located at the Northwest corner of

Review of Panel 136 of 825 of the National Flood Insurance Program Rate Maps published by FEMA for the City of Albuquerque, New Mexico, dated September 20,1998, indicates that this site does

The Grading Plan shows 1) existing and proposed grades indicated by spot elevations and contours

character of the proposed improvements and , 4) continuity between existing and proposed grades.

not lie within a designated flood zone, nor does it contribute to any downstream flooding. The

at 1.0' intervals, 2) the limit and character of the existing improvements, 3) the limit and

As shown by this plan, the proposed construction will include the building additions and the

which is adjacent to the west property line. The pipes will be covered with base course and asphalt. The pipes will carry the off-site flows from the development to the North. Additional parking will be placed over the proposed pipe to obtain additional parking. Curb and gutter will be placed along the west property line to assure that no overflow will spill over onto the property to

additional parking. Two 8" pvc pipes will be placed on top of the existing concrete valley gutter

The calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The procedure for 40-acres and smaller basins, as set forth in the revision of Section 22.2, Hydrology of the Development Process Manuel, Volume 2, Design Criteria, dated January 1993, has been used to quantify the peak rate of discharge and volume of

As indicated by the existing drainage plan, off-site flows do not impact this site. This is due to Adams St. on the east and Columbine Ave. To the South. This plan provides for free discharge

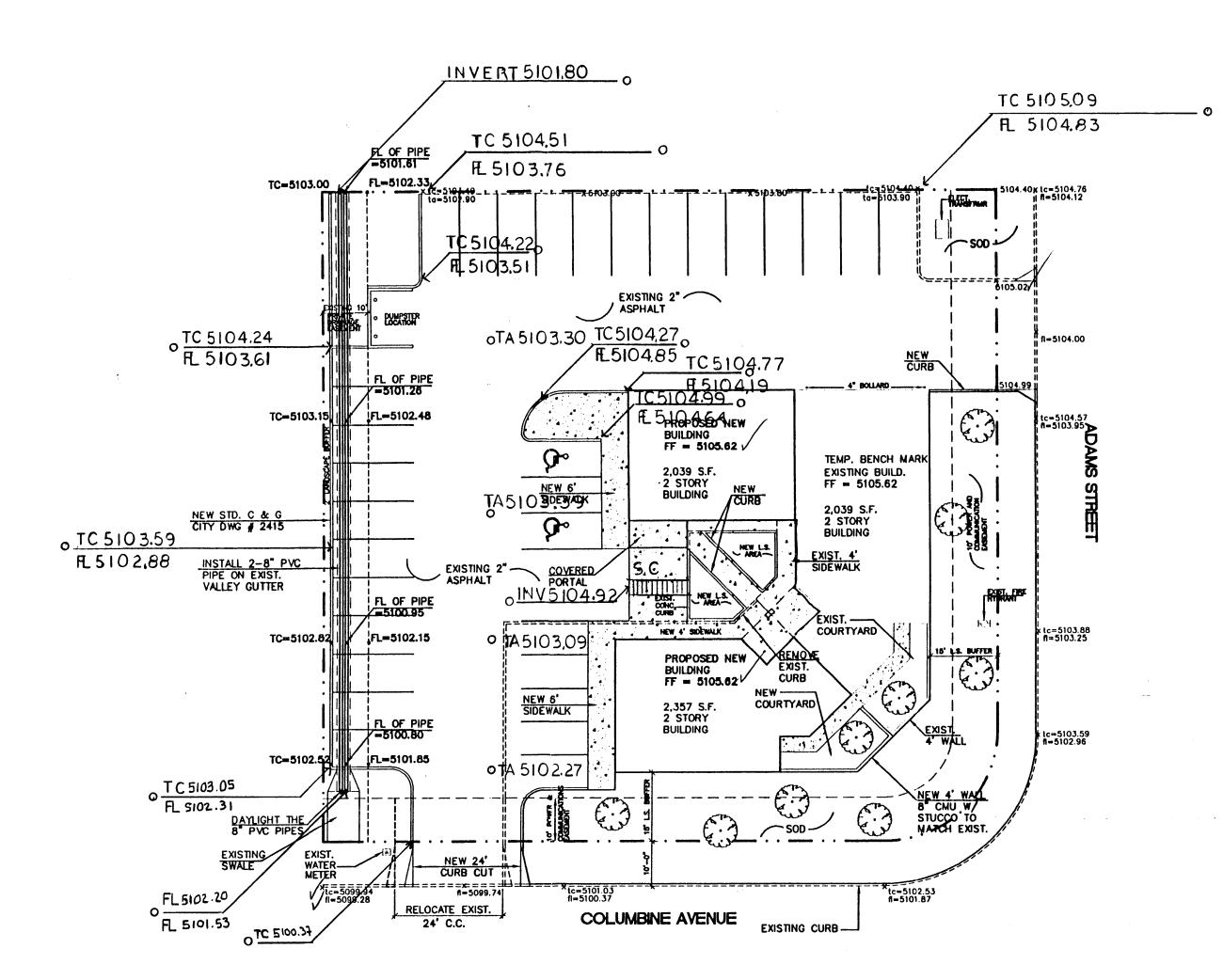
onto Columbine Ave. Due to the fact that this is a modification to an existing site within an infill

Columbine Avenue and Adams Street NE. At present the lot is improved with a two story

proposed addition will include two—two story structures with additional parking area.

1. Vicinity Map 2. Drainage Plan 3. Calculations

structure and associated parking (C17-D2A7).



07-Jul-98 Calculations: Total Basin Calculations are based on "Section 22.2 Hydrology of the Development Process Manual, Volume 2, Design Criteria for the City of Albuquerque, New Mexico, January 1993 — basins < 40 acres".

Precipitation Zone = 2 Depth at 100-year, 6-hour storm: (Table A-2) P = 2.35 inches

Land Treatments: From Table 5 - Percent Treatment D Single Family Residential = 7*SQR((N*N) + (5*N))where N = units/acreN = -----, ok < 6 N = 0.00Therefore Percent Treatment D = 0.00%(includes local streets)

Areas: (acres) Existing Proposed Treatment A 0.00 0.00 Treatment B 0.00 0.00 Treatment C 0.12 0.12 Treatment D 0.38 0.38 Total (acres) = $0.50 \ 0.50$

Volume 100 year 100 year 10 year 2 year 2 year Existing Proposed Existing Proposed Existing Proposed Volume (acre-feet) = $0.08 \ 0.08 \ 0.05 \ 0.05 \ 0.03$ Volume (cubic feet) = 3,386 3,405 2,055 2,071 1,143 1.155

Total Q(p), cfs: 100 year 100 year 10 year 2 year 2 year Existing Proposed Existing Proposed Q(p)*A Q(p)*A Q(p)*A Q(p)*A Q(p)*ATreatment A 0.00 0.00 0.00 0.00 0.00 0.00 Treatment B 0.00 0.00 0.00 0.00 0.00 0.00 Treatment C 0.38 0.36 0.21 0.20 0.07 0.07 Treatment D 1.77 1.79 1.18 1.20 0.70 0.71 Total Q (cfs) = $2.14 \ 2.15 \ 1.39 \ 1.39 \ 0.77 \ 0.78$

Excess Precipitation (E): (Table A-8) 100 yr 10 yr 2 yr Treatment A 0.53 0.13 0.00 Treatment B 0.78 0.28 0.02 Treatment C 1.13 0.52 0.15 Treatment D 2.12 1.34 0.79

100 year 100 year 10 year 2 year 2 year Existing Proposed Existing Proposed E*A E*A E*A E*A E*A Treatment A 0.00 0.00 0.00 0.00 0.00 0.00 Treatment B 0.00 0.00 0.00 0.00 0.00 0.00 Treatment C 0.14 0.13 0.06 0.06 0.02 0.02 Treatment D 0.80 0.81 0.50 0.51 0.30 0.30 Total 0.93 0.94 0.57 0.57 0.31 0.32

Weighted E = Total E*A/Total Area

100 year 100 year 10 year 10 year 2 year 2 year Existing Proposed Existing Proposed Existing Proposed Weighted E (inches) = 1.88 1.89 1.14 1.15 0.63 0.64 Weighted E (feet) = 0.16 0.16 0.10 0.10 0.05 0.05

Peak Discharge (cfs/acre) = Q(p): (Table A-9) Q(p) Q(p) Q(p)100 year 10 year 2 year Treatment A 1.56 0.38 0.00 Treatment B 2.28 0.95 0.08 Treatment C 3.14 1.71 0.60 Treatment D 4.70 3.14 1.86

restriction of the second seco

RATIONAL METHOD:

Coefficient C: (Table A-11) 100 year 10 year 2 year Treatment A 0.31 0.11 0.00 Treatment B 0.45 0.28 0.04 Treatment C 0.62 0.50 0.29 Treatment D 0.93 0.92 0.91

Peak Intensity (in/hour): (Table A-10) 5.05 3.41 2.04

Q = CIA (cfs): 100 year 100 year 10 year 2 year 2 year Existing Proposed Existing Proposed CIA CIĂ CIA CIA CIA Treatment A 0.00 0.00 0.00 0.00 0.00 0.00 Treatment B 0.00 0.00 0.00 0.00 0.00 0.00 Treatment C 0.38 0.36 0.21 0.20 0.07 0.07 Treatment D 1.76 1.79 1.18 1.20 0.70 0.71 Total Q (cfs) = $2.14 \ 2.15 \ 1.38 \ 1.39 \ 0.77 \ 0.78$

DRAINAGE CERTIFICATION FOR ACCUTECH ADDITION @ 8901 ADAMS ST. NE

AS INDICATED BY THE AS-BUILT INFORMATION SHOWN HEREON. THE ACCUTECH ADDITION AT 8901 ADAMS STREET NE HAS BEEN GRADED AND DRAINED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN DATED 7/19/98 WITH THE FOLLOWING DEVIATION:

1. A 4" ASPHALT OVERLAY WAS ADDED THRU OUT THE COMPLETE SITE.

THIS DEVIATION DOES NOT IMPACT THE DRAINAGE CONCEPT IN ANY WAY. THE SITE DRAINAGE WILL FUNCTION IN ACCORDANCE WITH THE PATTERNS ESTABLISHED BY THE APPROVED PLAN. THEREFORE A PERMANENT CERTIFICATE OF OCCUPANCY IS HEREBY RECOMMENDED. THE AS-BUILT INFORMATION SHOWN HEREON WAS OBTAINED BY ME OR UNDER MY DIRECT ARI SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF

HAROLD L. BENNETT, NMPE # 10776

DATE 1/21/99

BENCHMARK

ACS "6-C17" CENTRAL STATION DATA NM STATE PLANE COORDINATES CENTRAL ZONE X=382262.47 Y=1495630.34 G-G=0.99967825 $\Delta = -00^{\circ}13'35''$ ELEV=5120.26 LOCATED AT THE INTERSECTION OF JEFFERSON AND LOS ANGELES, NAIL IN POLE

DRAINAGE PLAN

The following items concerning Lot 23 Richfield Park Subdivision Drainage Plan.

The proposed drainage plan as shown by the vicinity map, is located at the Northwest corner of Columbine Avenue and Adams Street NE. At present the lot is improved with a two story structure and associated parking (C17-D2A7).

Review of Panel 136 of 825 of the National Flood Insurance Program Rate Maps published by FEMA for the City of Albuquerque, New Mexico, dated September 20,1998, indicates that this site does not lie within a designated flood zone, nor does it contribute to any downstream flooding. The proposed addition will include two—two story structures with additional parking area.

The Grading Plan shows 1) existing and proposed grades 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 shown by this plan, the proposed construction will include the building additions and the additional parking. Two 8" pvc pipes will be placed on top of the existing concrete valley gutter which is adjacent to the west property line. The pipes will be covered with base course and asphalt. The pipes will carry the off-site flows from the development to the North. Additional parking will be placed over the proposed pipe to obtain additional parking. Curb and gutter will be placed along the west property line to assure that no overflow will spill over onto the property to

The calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The procedure for 40-acres and smaller basins, as set forth in the revision of Section 22.2, Hydrology of the Development Process Manuel, Volume 2, Design Criteria, dated January 1993, has been used to quantify the peak rate of discharge and volume of run-off generated.

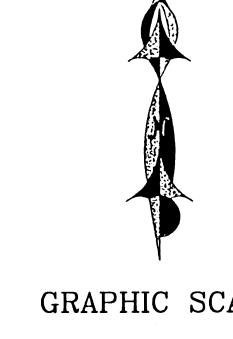
As indicated by the existing drainage plan, off—site flows do not impact this site. This is due to Adams St. on the east and Columbine Ave. To the South. This plan provides for free discharge onto Columbine Ave. Due to the fact that this is a modification to an existing site within an infill

EROSION CONTROL PLAN AND POLLUTION PREVENTION NOTES

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.

IS THE RESPONSIBILITY OF THE CONTRACTOR.

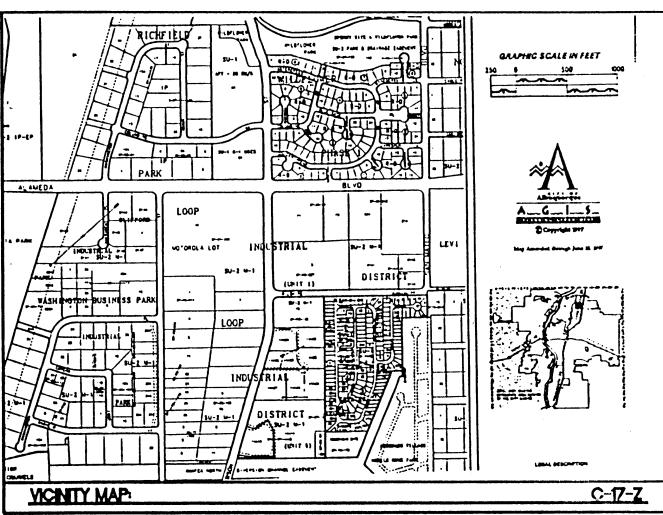
- 2. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT OUT OF EXISTING RIGHT-OF-WAY.
- 3. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL STORM RUN OFF
- ON SITE. 4. REPAIR OF DAMAGED FACILITIES AND CLEAN-UP OF SEDIMENT ACCUMULATION ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES
- 5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY



GRAPHIC SCALE

SCALE: 1"=20'

20/ACCUTECH-GR.DWG/7-6-98



LEGAL DESCRIPTION

PROJECT DATA:

PROJECT ADDRESS:

TOTAL ADDITION:

4,400 S.F.

LOT 23 RICHFIELD PARK SUBDIVISION, PHASE I

1. ALL SPOT ELEVATIONS PRESENT THE FLOWLINE ELEVATION UNLESS.

2. ADD 5100 TO ALL THE PROPOSED SPOT ELEVATIONS.

PROJECT DESCRIPTION: NEW BUILDING ADDITION TO THE EXISTING OFFICE BUILDING 8901 ADAMS STREET, NE FEB 02 1999

EXISTING FENCE
EXISTING POWER LINES
EXISTING CURB & GUTTER
BOUNDARY LINE
EASEMENT
PROPOSED SIDEWALK
PROPOSED GRADE
EXISTING GRADE

EXISTING MANHOLE

AS-BUILT GRADE

NOTICE TO CONTRACTORS

o V

1. 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.

2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION,

3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.

4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. 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 RESIDENTIAL STREET USE. 6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER
- OF THE PROPERTY SERVED. 7. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

