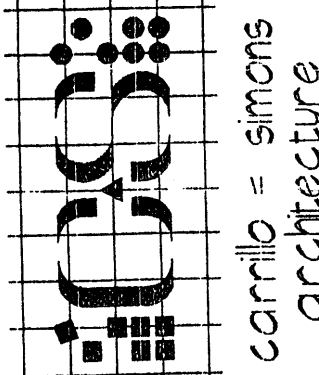


CARROLL'S ARCHITECTURE & INTERIOR DESIGN, INC. is a professional corporation. The undersigned, Joseph F. Simons Jr., is a duly licensed and registered architect in the State of New Mexico. The undersigned hereby certifies that the plans and specifications herein are the work of the undersigned or under the direct supervision and control of the undersigned, and that the undersigned is a duly licensed and registered architect in the State of New Mexico. The undersigned further certifies that the plans and specifications herein are in accordance with the applicable laws, rules, and regulations of the State of New Mexico. The undersigned further certifies that the plans and specifications herein are in accordance with the applicable laws, rules, and regulations of the State of New Mexico. The undersigned further certifies that the plans and specifications herein are in accordance with the applicable laws, rules, and regulations of the State of New Mexico.

William M. Carroll, abt
Joseph F. Simons Jr., abt
480 Irving NW, #303
Albuquerque, NM 87114
PH: (505) 440-4440
jsimons@carroll.com



Carroll & Simons
Architecture

SITE PLAN

REVISIONS
DATE
JUNE 2001
JOB NUMBER
DRAWN BY
SMONS

SITE

LEGAL DESCRIPTION: LOT 12A, TINLEY PARCELS, A REPLAT OF LOT 12 & 13, BERNALILLO COUNTY, NEW MEXICO.
ZONING CLASSIFICATION: SUI FOR C-1 USE
PARKING REQUIREMENTS: 5600 S.F. NET / 200 S.F. PER PERSON = 28 SPACES
28 SPACES PROVIDED
2 ACCESSIBLE SPACES PROVIDED
1400 S.F. WAREHOUSE = 2 SPACES

ADA NOTE

Contractor shall obtain and become familiar with the publication by the "Council of American Building Officials" entitled "CABO/ANSI 117.1-1998" American National Standards.

BUILDING

OCCUPANCY GROUP: A3
CONSTRUCTION TYPE: V-N
FLOOR AREA ACTUAL: 8000 S.F.
FLOOR AREA ALLOWABLE: 6000 S.F.
OPEN ON THREE SIDES INCREASE TO: 12000 S.F. ALLOWABLE
NO. STORIES ACTUAL: 1
NO. STORIES ALLOWABLE: 1
OCCUPANT LOAD: 56

OTHER FIRE RATINGS -
CORRIDOR: 1 hour, 20 min. doors
MECHANICAL / ELECTRICAL ROOMS: 1 hour, 45 min. doors
Concrete Strength: 2500 psi & 4000 psi
Roof Load: 35 psf total

FIRE MARSHALL REQUIREMENTS

FIRE EXTINGUISHERS: (2) TYPE ABC
FIRE HYDRANTS: (2) W/IN 450 FT.

TOILET PROVISIONS

OCCUPANTS	TOILETS	LAVATORIES	DRINKING F.
23 MEN	2 TOIL.	3	
	2 URINAL		
23 WOMEN	2 TOIL.	1	

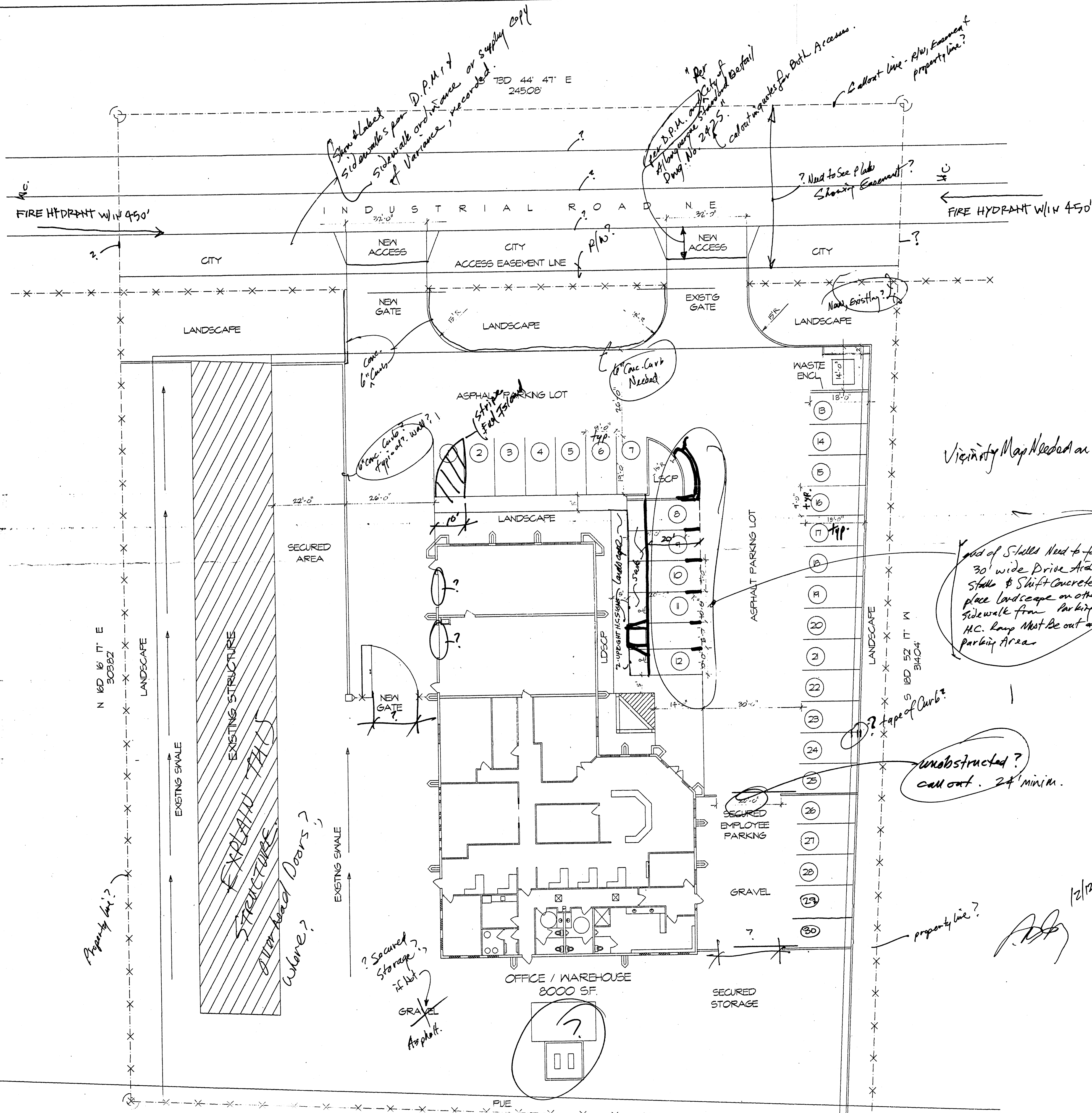
GENERAL NOTES

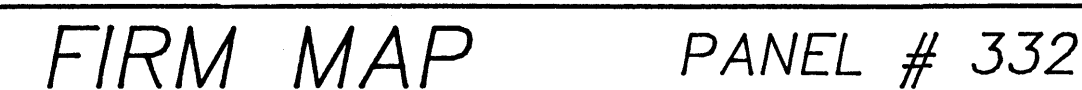
- ALL CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING CODES:
1997 UNIFORM BUILDING CODE
1997 UNIFORM MECHANICAL CODE
1997 UNIFORM PLUMBING CODE
1998 NATIONAL ELECTRICAL CODE
1997 UNIFORM FIRE CODE
- ALL PRODUCTS LISTED BY ICBO / N.E.R. NUMBERS SHALL BE INSTALLED PER THE REPORT AND MANUFACTURER'S WRITTEN INSTRUCTIONS. PRODUCT SUBSTITUTIONS SHALL HAVE ICBO APPROVED REPORT OR BE APPROVED BY UL OR OTHER RECOGNIZED NATIONAL TESTING LABORATORY.
- CONTRACTOR RESPONSIBLE FOR NOTES ON THIS SHEET AS WELL AS ALL SHEETS.
- FINISH GRADE SHALL SLOPE TO U.S.C. SPECIFICATIONS AWAY FROM BUILDING.
- AN ADDRESS MARKER WILL BE DISPLAYED IN PROMINENT MANNER SO THAT IT IS REASONABLY VISIBLE TO ENABLE EMERGENCY VEHICLES TO LOCATE THE BUILDING.
- OVEREXCAVATION WILL BE REQUIRED. REFERENCE OWNER FOR SOILS REQUIREMENTS.
- CONCRETE: f_c - 2500 P.S.I. MIN.
STAINED CONCRETE: f_c - 4000 P.S.I. MIN. W/ STAIN PAINTED AFTER CURING.
MASONRY: GRADE "N", f_m - 1500 P.S.I. MIN.
MORTAR: TYPE "S" - 1800 P.S.I. MIN.
GROUT: f_c - 2000 P.S.I. MIN.
- CONCRETE SLABS ON GRADE: LANDLINGS AT ALL DOOR LOC'S SHALL HAVE A MIN. SLOPE OF 1/8" / FT.
SEAL AROUND ALL PENETRATIONS THROUGH FLOOR SLABS AND STEM WALLS.
- ALL ROOFING MATERIALS TO CONFORM TO ICBO #3161.
- INSULATION REQUIREMENTS: 5 1/2" R-11 AT WALLS, 12" R-30 AT CEILING
- CONTRACTOR RESPONSIBLE TO PROVIDE ALL FLASHINGS, JOINTS, AND SEALANTS AND OTHER WATER RESISTANT INSURE WATER TIGHT CONNECTIONS AT ALL INTERSECTIONS, PARALLEL AND PERPENDICULAR HORIZONTAL AND VERTICAL.
- STUCCO SYSTEM ICBO APPROVED 2 COAT PER PLAN; 3 COLORS TO BE SELECTED BY OWNER / ARCHITECT
- REF. PLANS FOR DOOR SCHEDULE
- DOOR HARDWARE TO BE SHLAGE, OR EQUAL.
- CYLINDER GUARD WILL BE CONSTRUCTED OF SOLID METAL, NO HOLLOW SHELLS ALLOWED.
- ALL EXITS TO BE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE
- REF. OTHER SHEETS IN THIS SET FOR NOTES NOT WRITTEN IN THIS SECTION.
- WATER RESILIENT PAINT AT ALL WET AREAS, I.E. ANY ROOM THAT HAS WATER PLUMBING TO IT
- PAINT TO BE "SHERWIN WILLIAMS" OR EQUAL, COLOR PER OWNER.
- CABINETS BE OAK OR NATURAL QUERRY BASE, PLASTIC LAMINATE TOPS, SOLID BRASS DOORS, BRASS HARDWARE
- COLORS AND STAINS TO BE APPROVED BY OWNER / ARCHITECT
- CERAMIC TILE IN FLOOR AND EXTERIOR WALL U/L APPROVED, COLOR BY ARCHITECT
- CARPET TO BE COMMERCIAL GRADE SLUE DOWN TO U/L APPROVED, STYLE AND COLOR PER OWNER APPROVAL
- BASE TO BE U/L APPROVED RESILIENT BASE, COLOR PER OWNER / ARCHITECT
- NON LOAD BEARING WALLS, 1 HOUR RATED, 4" 24 GA. MTL. STUDS 16" O.C. W/ 5/8" X 6" BD. EA. FACE 10 FT. ON-CHUCK ABOVE WITH SCREWS 12" O.C. AND GYF. COMPOUND ALL SEAMS AND EDGES. RATED WALLS OCCUR AT ALL EXIT CORRIDORS, AROUND THE ENTIRE LOBBY, AND THE MECHANICAL ROOM.
- NON-LOAD BEARING NON-RATED WALLS 4" 24 GA. MTL. STUDS.

LOT 12A
TINLEY PARCELS
REPLAT LOTS 12 & 13
ALBUQUERQUE, NM

ALBUQUERQUE
BLDG & SAFETY
OCT 23 2001
U.S.C.
PLAN CHECK
SECTION

SITE PLAN





THE OFFICE PROJECT IS LOCATED IN AN ESTABLISHED INDUSTRIAL PARK OF BERNAILLO COUNTY APPROXIMATELY 2.5 MILES NORTH OF THE DISTRICT OFFICE OF ALBUQUERQUE, N.M. THE GRADING & DRAINAGE SCHEME HEREON IS IN COMPLIANCE WITH THE BERNAILLO COUNTY FLOOD HAZARD ORDINANCE, NO.88-46, AND THE STORM DRAINAGE ORDINANCE, 96-5. THE PLAN IS REQUIRED IN ORDER TO FACILITATE THE OWNER'S REQUEST FOR BUILDING PERMIT. THE PLAN SHOWS:

1. EXISTING CONTOURS, AND SPOT ELEVATIONS, EXISTING WAREHOUSE BUILDING, GRAVEL SURFACING, AND DRAINAGE PATTERNS.
2. PROPOSED IMPROVEMENTS: OFFICE BUILDING, ASPHALT DRIVES AND PARKING AREA, REFUSE LOCATION, NEW GRADE ELEVATIONS, AND LANDSCAPING.
3. CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS.
4. QUANTIFICATION AND ACCEPTANCE OF UPSTREAM OFF-SITE FLOWS WHICH CONTRIBUTE TO THE DEVELOPED FLOWS GENERATED BY THE IMPROVEMENTS.

THE PURPOSE OF THE PLAN IS TO ESTABLISH CRITERIA FOR CONTROLLING STORM RUNOFF AND EROSION, AND ESSENTIALLY ALLOWING HISTORIC FLOWS TO CONTINUE TO DRAIN THROUGH THE PROPERTY. PRESENTLY, THE SITE IS BOUNDED ON THE NORTH BY 2-LANE KASHA ROAD WITHIN A PRIVATE DRIVEWAY. DEVELOPED PROPERTY IS ADJACENT ON THE EAST AND SOUTH. THE SITE IS ADJACENT TO AN EXISTING GRAVEL LOT ON ALL OTHER ADJOINING LANDS. A 5000 SQUARE FOOT METAL BUILDING WAREHOUSE IS LOCATED TOWARD THE WESTERN PORTION OF THE LOT AND WILL REMAIN. THE SITE SLOPES DOWN AT APPROXIMATELY 4% PERCENT FROM EAST TO WEST AND DRAINS TO AN EXISTING GRAVEL LINED SWALE ALONG INDUSTRIAL ROAD.

THE PROJECT IS NOT LOCATED WITHIN A FEMA FLOOD HAZARD ZONE. THE PROPOSED 8100 SQUARE FEET OFFICE BUILDING, FLATWORK, AND PARKING AREA WILL CONTINUE TO DRAIN TO THE EXISTING BAR DITCH SWALE/DOWNSTREAM SYSTEM

DESIGN CRITERIA

HYDROLOGIC METHODS PER SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL (DPM)
REVISED JANUARY 1993 FOR CITY OF ALBUQUERQUE ADOPTED BY THE COUNTY OF BERNALILLO
DISCHARGE RATE: $Q=QPEAK \times AREA$, "Peak Discharge Rates for Small Watersheds"
VOLUMETRIC DISCHARGE: $VOLUME = E_{weighted} \times AREA$
 $P100 = 2.35$ Inches, Zone 2 $P10-DAY = 3.95''$ Time of Concentration, TC = 10 Minutes
DESIGN STORM: 100-YEAR/6-HOUR, 10-YEAR/6-HOUR [] = 10 YEAR VALUES

HISTORIC CONDITIONS

LOT AREA = 1.69 ACRES, WHERE EXCESS PRECIP. 'A' = 0.53 in. [0.13]
PEAK DISCHARGE, Q100 = 2.64 CFS [0.6], WHERE UNIT PEAK DISCHARGE 'A' = 1.56 CFS/AC. [0.64]
THEREFORE: VOLUME 100 = 3251 CF [798]

DEVELOPED CONDITIONS - w/ New Office & Parking

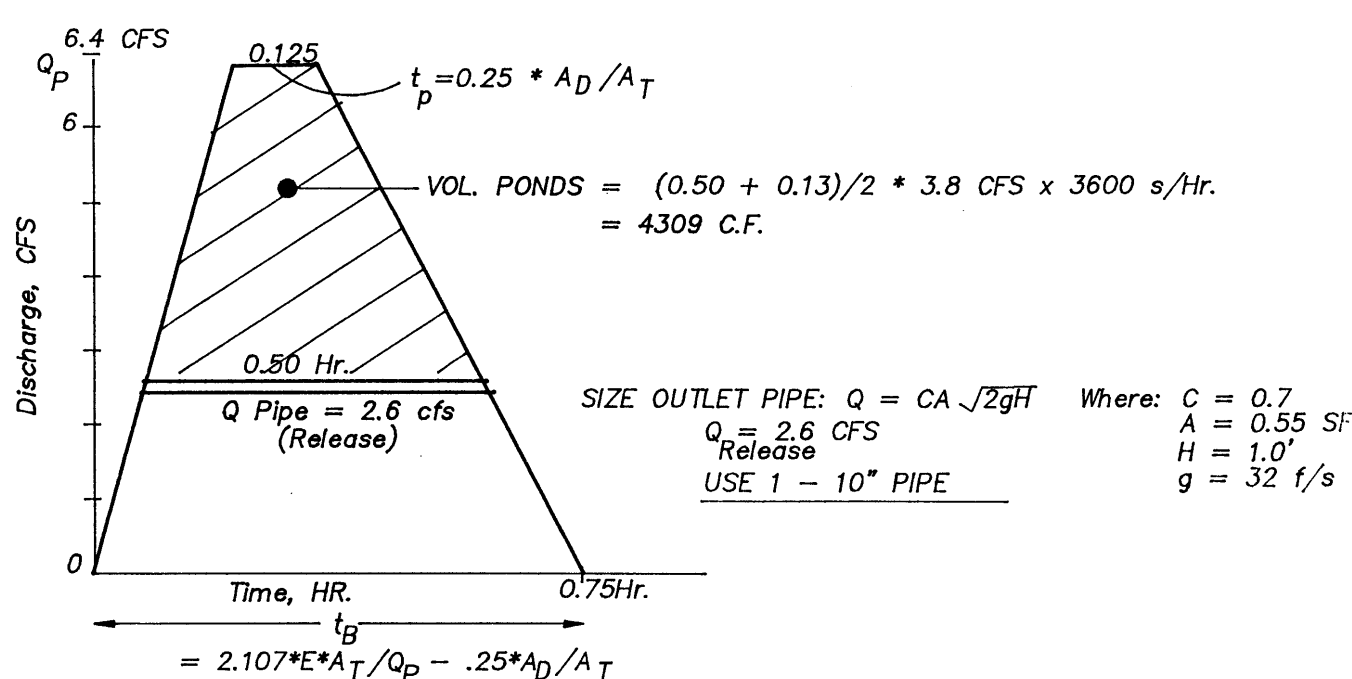
	AREA	LAND TREATMENT
UNDEVELOPED	-----	A
LANDSCAPING / PONDING AREA	0.21 Ac.(13%)	B
GRAVEL & COMPACTED SOIL	0.64 Ac.(37%)	C
ROOF - PAVEMENT	0.84 Ac.(50%)	D
	<u>1.69 AC.</u>	

THEREFORE: $E_{Weighted} = 1.579 \ln(.0898)$ & $VOLUME\ 100 = 9687\ CF$
 $Q100 = 6.4\ CFS$
 $Q10 = 3.9\ CFS$ $VOLUME\ 10 = 5509\ CF$

SIZE REQUIRED DETENTION POND

SINCE A DOWNSTREAM STORM DRAIN SYSTEM EXISTS, AND CAPACITY EXISTS FOR EXISTING CONDITION, RECOMMEND PONDING THE DIFFERENCE OF VOLUME DEVELOPED - VOLUME HISTORIC

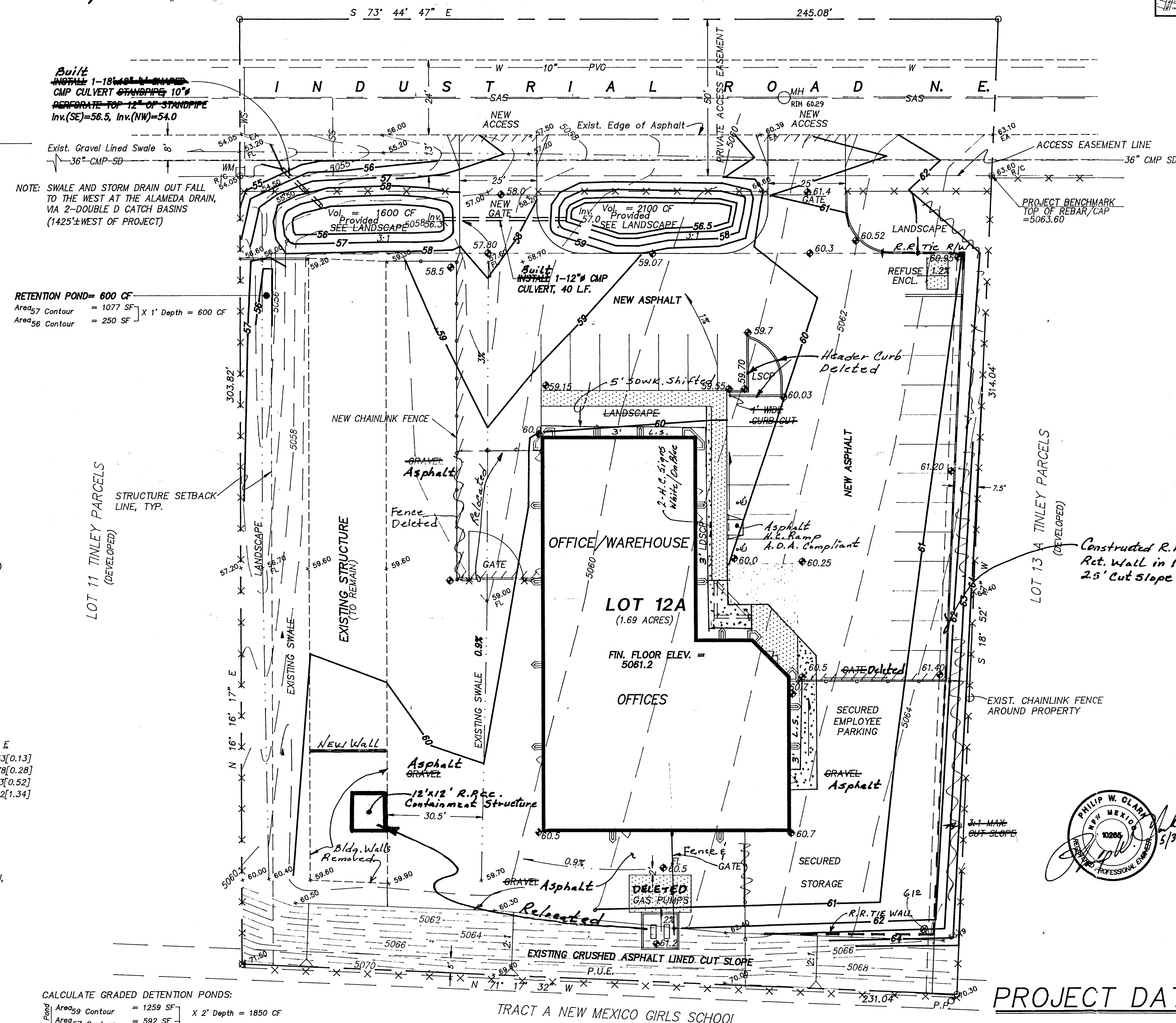
DETENTION POND PER HYDROGRAPH & DPM, Section A.8
STORAGE VOLUME (Required) = VOLUME AREA ABOVE ALLOWABLE RELEASE



I, PHILIP W. CLARK, A PROFESSIONAL ENGINEER LICENSED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT I HAVE VISITED THE SITE SHOWN HEREON, AND THAT THE CONTOURS SHOWN REPRESENT THE EXISTING GROUND CONDITIONS, AND DO FURTHER CERTIFY THAT NO EARTHWORK OF ANY KIND, NOR ANY DISTURBANCE OF THE EXISTING GROUND HAS OCCURRED ON THIS SITE SINCE THE CONTOURS WERE DETERMINED.

 5-31-01
PHILIP W. CLARK NMPE #10265

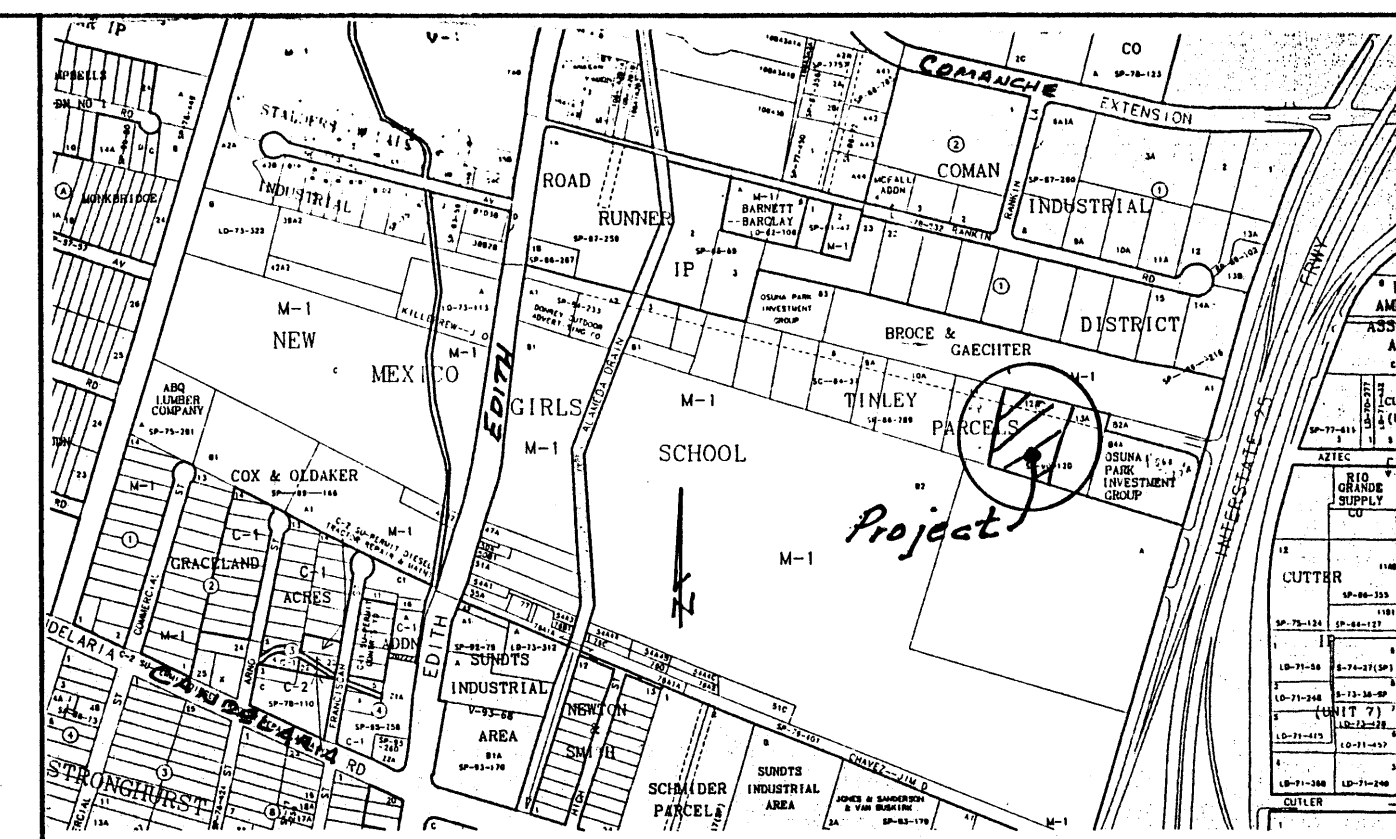
Scale: 1" = 20'



CALCULATE GRADED DETENTION PONDS:

East Pond
 Area₅₉ Contour = 1259 SF
 Area₅₇ Contour = 592 SF
 Area_{56.5} Contour = 415 SF
 X 2' Depth = 1850 CF
 X 0.5' Depth = 250 CF
 West Pond
 Area₅₈ Contour = 1190 SF
 Area₅₆ Contour = 413 SF
 X 2' Depth = 1600 CF

Total Detention Ponds (2) = 2100 + 1600 = 3700 CF
+ Retention (See Plan) = 4300 CF...OK



VICINITY MAP ZONE G-15
1" = 750'

NOTES

1. ALL WORK WITHIN THE RIGHT-OF-WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECS. FOR PUBLIC WORKS CONSTRUCTION, 6TH EDITION W/ UPDATES.
2. AN EXCAVATION/CONSTRUCTION PERMIT IS REQUIRED BEFORE BEGINNING ANY WORK WITHIN ACCESS EASEMENT. AN APPROVED COPY OF THIS PLAN MUST BE SUBMITTED AT THE TIME OF APPLICATION.
3. 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.
4. CONTRACTOR SHALL ENSURE THAT NO SITE SOILS/SEDIMENT OR SILT ENTER THE RIGHT-OF-WAY DURING CONSTRUCTION.
5. REVEGETATE ALL AREAS DISTURBED DUE TO CONSTRUCTION PER CITY OF ALBUQ. SPEC. 1011, NATIVE SEED MIX.
6. MAXIMUM SITE GRADING WITHOUT EROSION PROTECTION:
3 HORIZONTAL TO 1 VERTICAL, 3:1. STOCKPILE EXISTING GRAVEL, REGRADE, AND REPLACE GRAVEL IN PROPOSED DRIVING/PONDING AREAS.

LEGEND

EXIST. SPOT ELEVATION	+24.0
EXIST. CONTOUR	-10
NEW SPOT ELEVATION	24.0
NEW CONTOUR	12
EXIST. EDGE OF ROAD	
NEW SWALE	
DRAINAGE DIRECTION	
NEW HEADER CURB (0.5' HEIGHT)	
EDGE OF GRAVEL	EG
EDGE OF ASPHALT	EA
EXISTING POWER POLE	o PP
TOP OF ASPHALT, EXISTING	TA

AS-CONSTRUCTED

I, PHILIP W. CLARK, PROFESSIONAL ENGINEER, REGISTERED IN ACCORDANCE WITH THE LAWS IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE ROADWAY, DRAINAGE, IMPROVEMENTS SHOWN ON THIS PLAN ARE IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN.

Philip W. Clark 1/29/02
PHILIP W. CLARK, P.E. #10265

PROJECT DATA

LEGAL DESCRIPTION

LOT 12A OF TINLEY PARCELS, BERNALILLO COUNTY
NEW MEXICO, PLAT FILED 1990.

PROJECT BENCHMARK

PROJECT BENCHMARK
NORTHEAST EASEMENT CORNER MARKED BY REBAR/CAP,
ELEV. = 5063.60, AS TIED TO CITY SAS MH # 671,
LOCATED WITHIN INDUSTRIAL ROAD, 90'± EAST OF
PROJECT.

TOPOGRAPHIC DESIGN SURVEY

PERFORMED BY CLARK CONSULTING ENGINEERS, DATE 5/14/01

Clark Consulting Engineers
19 Ryan Road
Edgewood, New Mexico 87015

Edgewood, New Mexico 87015
 Tele: (505) 281-2444 Fax: (505) 281-2444

DATE	REVISION	LOT 12A, TINLEY PARCELS BERNALILLO COUNTY NEW MEXICO
		UWM DESERT ROOFING OFFICE BUILDING

Grading & Drainage Plan

DESIGNED BY: PWC	DRAWN BY: CCE	JOB #: HD ROOF	1 OF 1
CHECKED BY: PWC	DATE: 5/14/01	FILE #: G/D	

SEE APPROVED DESIGN

I, PHILIP W. CLARK, A PROFESSIONAL ENGINEER LICENSED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT I HAVE VISITED THE SITE SHOWN HEREON, AND THAT THE CONTOURS SHOWN REPRESENT THE EXISTING GROUND CONDITIONS, AND DO FURTHER CERTIFY THAT NO EARTHWORK OF ANY KIND, NOR ANY DISTURBANCE OF THE EXISTING GROUND HAS OCCURRED ON THIS SITE SINCE THE CONTOURS WERE DETERMINED.

Philip W. Clark 2/7/02
PHILIP W. CLARK NMPE #10265

FIRM MAP PANEL # 332

GRADING & DRAINAGE PLAN

THE OFFICE PROJECT IS LOCATED IN AN ESTABLISHED INDUSTRIAL PARK OF BERNALILLO COUNTY APPROXIMATELY 2.5 MILES NORTH OF THE DOWNTOWN CORE OF ALBUQUERQUE, NM. THE GRADING & DRAINAGE SCHEME HEREON IS IN COMPLIANCE WITH THE BERNALILLO COUNTY FLOOD HAZARD ORDINANCE, NO. 88-46, AND THE STORM DRAINAGE ORDINANCE, 96-5. THE PLAN IS REQUIRED IN ORDER TO FACILITATE THE OWNER'S REQUEST FOR BUILDING PERMIT. THE PLAN SHOWS:

- EXISTING CONTOURS, AND SPOT ELEVATIONS, EXISTING WAREHOUSE BUILDING, GRAVEL SURFACING, AND DRAINAGE PATTERNS.
- PROPOSED IMPROVEMENTS: OFFICE BUILDING, ASPHALT DRIVES AND PARKING AREA, REFUSE LOCATION, NEW GRADE ELEVATIONS, AND LANDSCAPING.
- CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS.
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THE PURPOSE OF THE PLAN IS TO ESTABLISH CRITERIA FOR CONTROLLING STORM RUNOFF AND EROSION, AND ESSENTIALLY ALLOWING HISTORIC FLOWS TO CONTINUE TO DRAIN THROUGH THE PROPERTY. PRESENTLY, THE SITE IS BOUNDED ON THE NORTH BY 2-LANE ASPHALT DRIVE WITHIN A PRIVATE ACCESS EASEMENT. DEVELOPED PROPERTY IS ADJACENT ON ALL OTHER ADJOINING LANDS. A 5000 SQUARE FOOT METAL BUILDING WAREHOUSE IS LOCATED ON THE WESTERN PORTION OF THE LOT AND WILL REMAIN. THE SITE SLOPES AT APPROXIMATELY 3-4 PERCENT FROM EAST TO WEST, AND DRAINS TO AN EXISTING GRAVEL LINED SWALE ALONG INDUSTRIAL ROAD.

THE PROJECT IS NOT LOCATED WITHIN A FEMA FLOOD HAZARD ZONE. THE PROPOSED 8100 SQUARE FEET OFFICE BUILDING, FLATWORK, AND PARKING AREA WILL CONTINUE TO DRAIN TO THE EXISTING BAR DITCH SWALE/DOWNSTREAM SYSTEM.

CALCULATIONS

REVISED, AS-BUILT CALCS.

DESIGN CRITERIA

HYDROLOGIC METHODS PER SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL (DPM) REVISED JANUARY 1993 FOR CITY OF ALBUQUERQUE ADOPTED BY THE COUNTY OF BERNALILLO. DISCHARGE RATE: $Q = Q_{PEAK} \times AREA$. "Peak Discharge Rates For Small Watersheds" VOLUMETRIC DISCHARGE: $VOLUME = E_{Weighted} \times AREA$ $P_{100} = 2.35$ inches, Zone 2 $P_{100}-DAY = 3.95"$ Time of Concentration, $TC = 10$ Minutes DESIGN STORM: 100-YEAR/6-HOUR, 10-YEAR/6-HOUR $[] = 10$ YEAR VALUES

HISTORIC CONDITIONS

LOT AREA = 1.69 ACRES, WHERE EXCESS PRECIP. 'A' = 0.53 in. [0.13] PEAK DISCHARGE, $Q_{100} = 2.64$ CFS [0.6] WHERE UNIT PEAK DISCHARGE 'A' = 1.56 CFS/AC. [0.64] THEREFORE: $VOLUME_{100} = 3251$ CF [798]

DEVELOPED CONDITIONS - w/ New Office & Parking

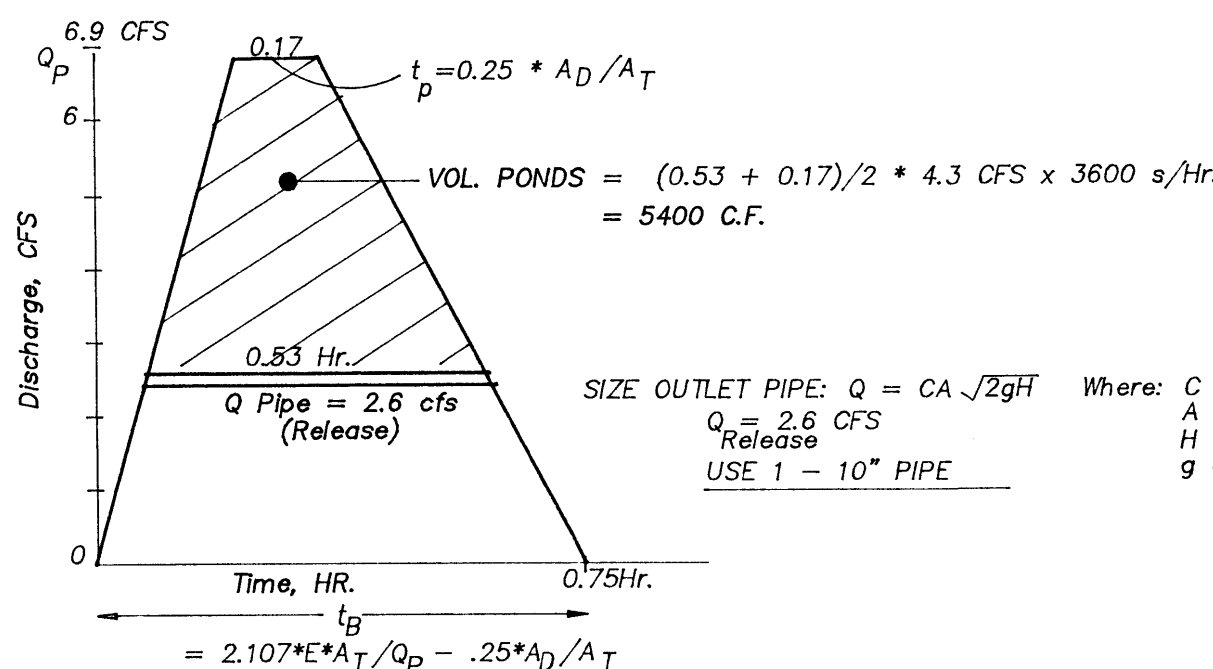
DETERMINE LAND TREATMENTS, PEAK DISCHARGE AND VOLUMETRIC DISCHARGE	AREA	LAND TREATMENT	Q Peak	E
UNDEVELOPED		A	1.56[0.38]	0.53[0.13]
LANDSCAPING / PONDING AREA	0.21 Ac.(13%)	B	2.28[0.95]	0.78[0.28]
GRAVEL & COMPACTED SOIL	0.32 Ac.(18%)	C	3.14[1.71]	1.13[0.52]
ROOF - PAVEMENT	1.16 Ac.(69%)	D	4.70[3.14]	2.12[1.34]
	1.69 Ac.			

THEREFORE: $E_{Weighted} = 1.76$ in.[1.06] & $Q_{100} = 6.9$ CFS VOLUME 100 = 10797 CF $Q_{10} = 4.3$ CFS VOLUME 10 = 6502 CF

SIZE REQUIRED DETENTION POND

SINCE A DOWNSTREAM STORM DRAIN SYSTEM EXISTS, AND CAPACITY EXISTS FOR EXISTING CONVICTION, RECOMMEND PONDING THE DIFFERENCE OF VOLUME DEVELOPED - VOLUME HISTORIC

DETENTION POND PER HYDROGRAPH & DPM, Section A.8 STORAGE VOLUME (Required) = VOLUME AREA ABOVE ALLOWABLE RELEASE

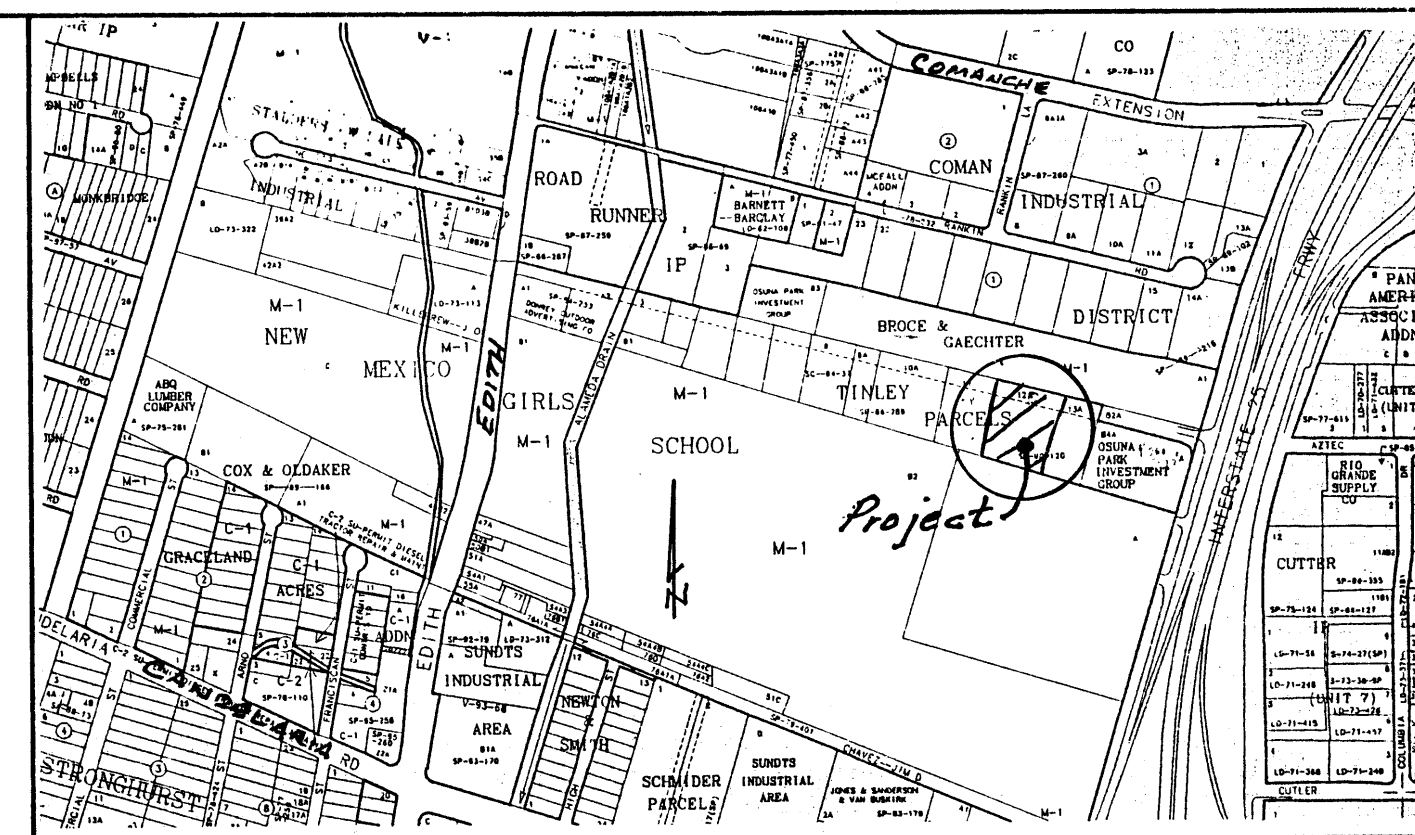


CALCULATE GRADED DETENTION PONDS:

Area 59 Contour = 1714 SF	X 2' Depth = 2540 CF
Area 57 Contour = 826 SF	X 1' Depth = 706 CF
Area 56 Contour = 587 SF	
Area 58 Contour = 865 SF	X 2.2' Depth = 1590 CF
Area 56 Contour = 580 SF	

Total Detention Ponds (2) = 3246 + 1590 = 4835 CF + Retention (See Plan) = 5435 CF...OK

Scale: 1" = 20'



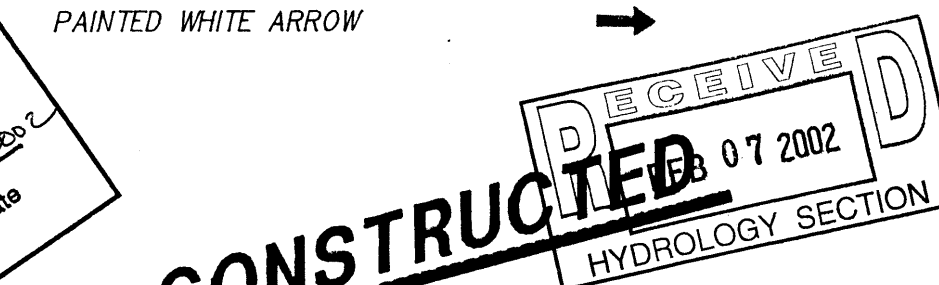
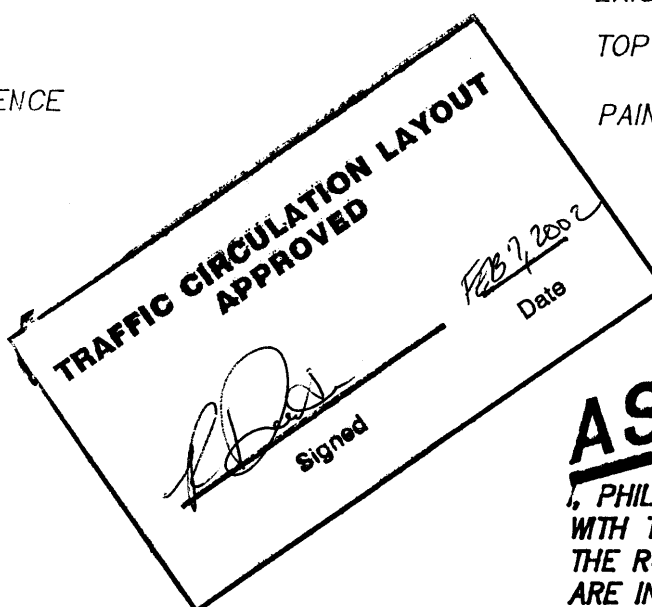
VICINITY MAP ZONE G-15
1" = 750'

NOTES

- ALL WORK WITHIN THE RIGHT-OF-WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECS. FOR PUBLIC WORKS CONSTRUCTION, 6TH EDITION W/ UPDATES.
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- REVEGETATE ALL AREAS DISTURBED DUE TO CONSTRUCTION PER CITY OF ALBUQ. SPEC. 1011, NATIVE SEED MIX.
- MAXIMUM SITE GRADING WITHOUT EROSION PROTECTION: 3 HORIZONTAL TO 1 VERTICAL, 3:1. STOCKPILE EXISTING GRAVEL, REGRADE, AND REPLACE GRAVEL IN PROPOSED DRIVING/PONDING AREAS.

LEGEND

EXIST. SPOT ELEVATION	+24.0
EXIST. CONTOUR	-10
NEW SPOT ELEVATION	+24.0
NEW CONTOUR	-12
EXIST. EDGE OF ROAD	
NEW SWALE	
DRAINAGE DIRECTION	
NEW HEADER CURB (0.5' HEIGHT)	
EDGE OF GRAVEL	EG
EDGE OF ASPHALT	EA
EXISTING POWER POLE	PP
TOP OF ASPHALT, EXISTING	TA
PAINTED WHITE ARROW	



I, PHILIP W. CLARK, PROFESSIONAL ENGINEER, REGISTERED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE ROADWAY, GRADING AND DRAINAGE IMPROVEMENTS SHOWN ON THIS PLAN ARE IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN.

Philip W. Clark
PHILIP W. CLARK, P.E. #10265

PROJECT DATA

LEGAL DESCRIPTION

LOT 12A OF TINLEY PARCELS, BERNALILLO COUNTY NEW MEXICO, PLAT FILED 1990.

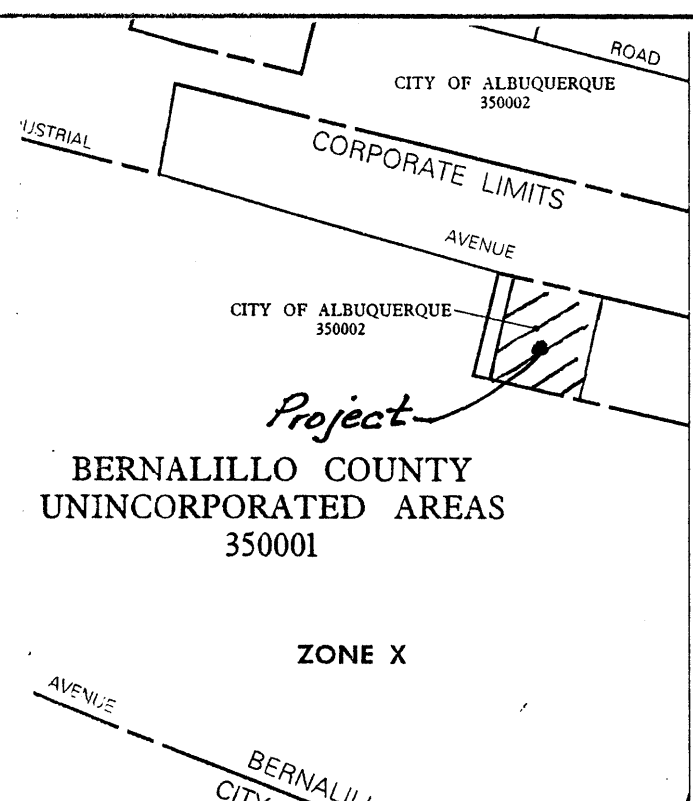
PROJECT BENCHMARK

NORTHEAST EASEMENT CORNER MARKED BY REBAR/CAP, ELEV. = 5063.60, AS TIED TO CITY SAS MH # 671, LOCATED WITHIN INDUSTRIAL ROAD, 90'± EAST OF PROJECT.

TOPOGRAPHIC DESIGN SURVEY

PERFORMED BY CLARK CONSULTING ENGINEERS, DATE 5/14/01

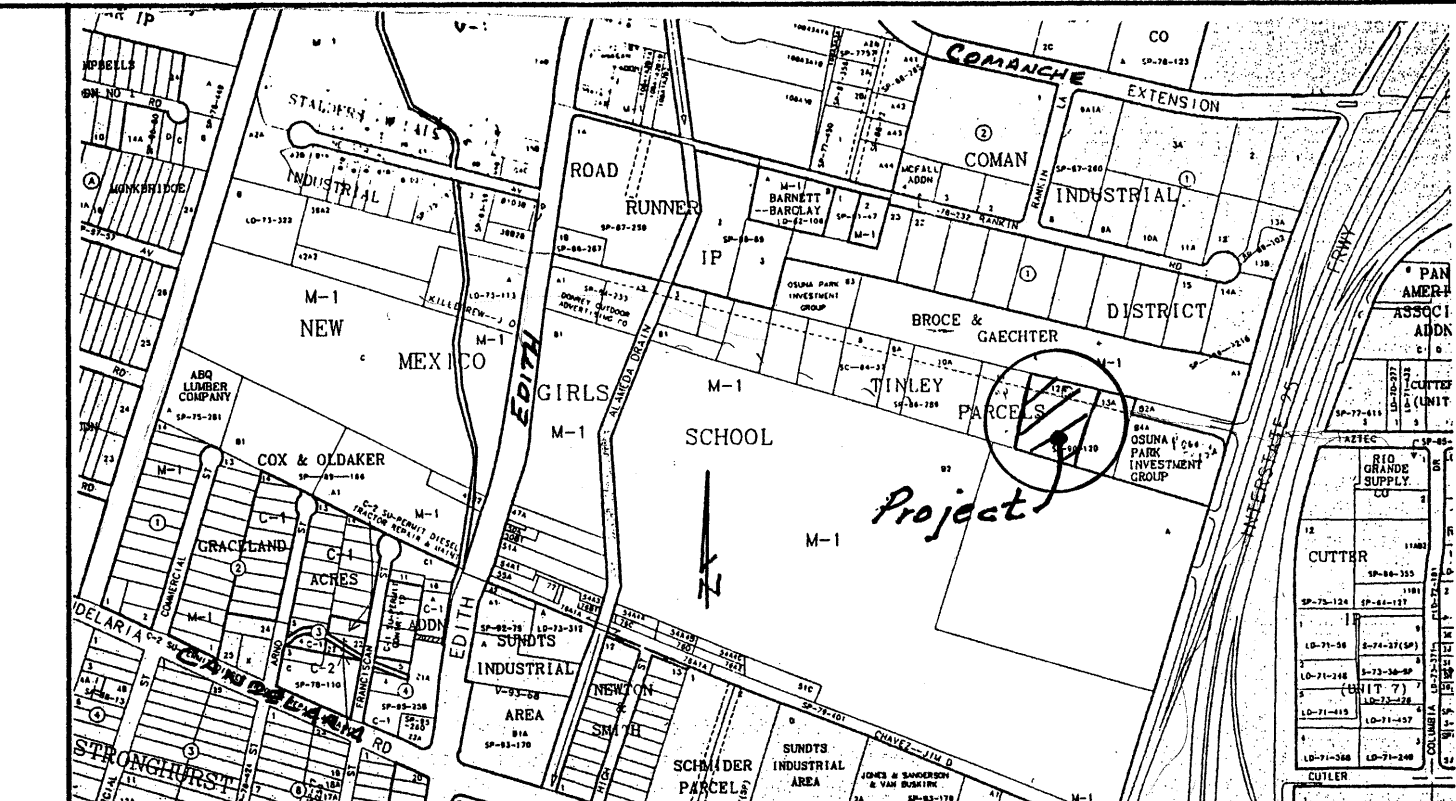
Clark Consulting Engineers			
19 Ryan Road Edgewood, New Mexico 87015			
Tel: (505) 281-2444		Fax: (505) 281-2444	
DATE	REVISION	LOT 12A, TINLEY PARCELS	NEW MEXICO
2/7/02	As-built	BERNALILLO COUNTY	NEW MEXICO
	Transp./Drng.	HIGH DESERT ROOFING OFFICE BUILDING	
	Comm'ty/Rep't	Grading, Drainage & Transpo Plan	
DESIGNED BY: PWC	DRAWN BY: CGE	JOB #: HD 0001	1 OF 1
CHECKED BY: PWC	DATE: 5/14/01	FILE #: G/D	



I, PHILIP W. CLARK, A PROFESSIONAL ENGINEER LICENSED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT I HAVE VISITED THE SITE SHOWN HEREON, AND THAT THE CONTOURS SHOWN REPRESENT THE EXISTING GROUND CONDITIONS, AND DO FURTHER CERTIFY THAT NO EARTHWORK OF ANY KIND, NOR ANY DISTURBANCE OF THE EXISTING GROUND HAS OCCURRED ON THIS SITE SINCE THE CONTOURS WERE DETERMINED.

Philip W. Clark 5-31-01
PHILIP W. CLARK NMPE #10265

Scale: 1" = 20'



FIRM MAP PANEL # 332

GRADING & DRAINAGE PLAN

THE OFFICE PROJECT IS LOCATED IN AN ESTABLISHED INDUSTRIAL PARK OF BERNALILLO COUNTY APPROXIMATELY 2.5 MILES NORTH OF THE DOWNTOWN CORE OF ALBUQUERQUE, NM. THE GRADING & DRAINAGE SCHEME HEREON IS IN COMPLIANCE WITH THE BERNALILLO COUNTY FLOOD HAZARD ORDINANCE, NO. 88-46, AND THE STORM DRAINAGE ORDINANCE, 96-5. THE PLAN IS REQUIRED IN ORDER TO FACILITATE THE OWNER'S REQUEST FOR BUILDING PERMIT. THE PLAN SHOWS:

1. EXISTING CONTOURS, AND SPOT ELEVATIONS, EXISTING WAREHOUSE BUILDING, GRAVEL SURFACING, AND DRAINAGE PATTERNS.
2. PROPOSED IMPROVEMENTS: OFFICE BUILDING, ASPHALT DRIVES AND PARKING AREA, REFUSE LOCATION, NEW GRADE ELEVATIONS, AND LANDSCAPING.
3. CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS.
4. QUANTIFICATION AND ACCEPTANCE OF UPSTREAM OFF-SITE FLOWS WHICH CONTRIBUTE TO THE DEVELOPED FLOWS GENERATED BY THE IMPROVEMENTS.

THE PURPOSE OF THE PLAN IS TO ESTABLISH CRITERIA FOR CONTROLLING STORM RUNOFF AND EROSION, AND ESSENTIALLY ALLOWING HISTORIC FLOWS TO CONTINUE TO DRAIN THROUGH THE PROPERTY. PRESENTLY, THE SITE IS BOUNDED ON THE NORTH BY 2-LANE ASPHALT DRIVE WITHIN A PRIVATE ACCESS EASEMENT. DEVELOPED PROPERTY IS ADJACENT ON ALL OTHER ADJOINING LANDS. A 5000 SQUARE FOOT METAL BUILDING WAREHOUSE IS LOCATED ON THE WESTERN PORTION OF THE LOT AND WILL REMAIN. THE SITE SLOPES AT APPROXIMATELY 3-4 PERCENT FROM EAST TO WEST, AND DRAINS TO AN EXISTING GRAVEL LINED SWALE ALONG INDUSTRIAL ROAD.

THE PROJECT IS NOT LOCATED WITHIN A FEMA FLOOD HAZARD ZONE, THE PROPOSED 8100 SQUARE FEET OFFICE BUILDING, FLATWORK, AND PARKING AREA WILL CONTINUE TO DRAIN TO THE EXISTING BAR DITCH SWALE/DOWNSTREAM SYSTEM.

CALCULATIONS

DESIGN CRITERIA

HYDROLOGIC METHODS PER SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL (DPM) REVISED JANUARY 1993 FOR CITY OF ALBUQUERQUE ADOPTED BY THE COUNTY OF BERNALILLO DISCHARGE RATE: $Q = Q_{PEAK} \times AREA$. "Peak Discharge Rates For Small Watersheds" VOLUMETRIC DISCHARGE: $VOLUME = E_{WEIGHTED} \times AREA$ $P_{100} = 2.35$ inches, Zone 2 $P_{10} - DAY = 3.95$ " Time of Concentration, $TC = 10$ Minutes DESIGN STORM: 100-YEAR/6-HOUR, 10-YEAR/6-HOUR [] = 10 YEAR VALUES

HISTORIC CONDITIONS

LOT AREA = 1.69 ACRES, WHERE EXCESS PRECIP. 'A' = 0.53 in. [0.13] PEAK DISCHARGE, $Q_{100} = 2.64$ CFS [0.6] WHERE UNIT PEAK DISCHARGE 'A' = 1.56 CFS/AC. [0.64] THEREFORE: $VOLUME_{100} = 3251$ CF [798]

DEVELOPED CONDITIONS - w/ New Office & Parking

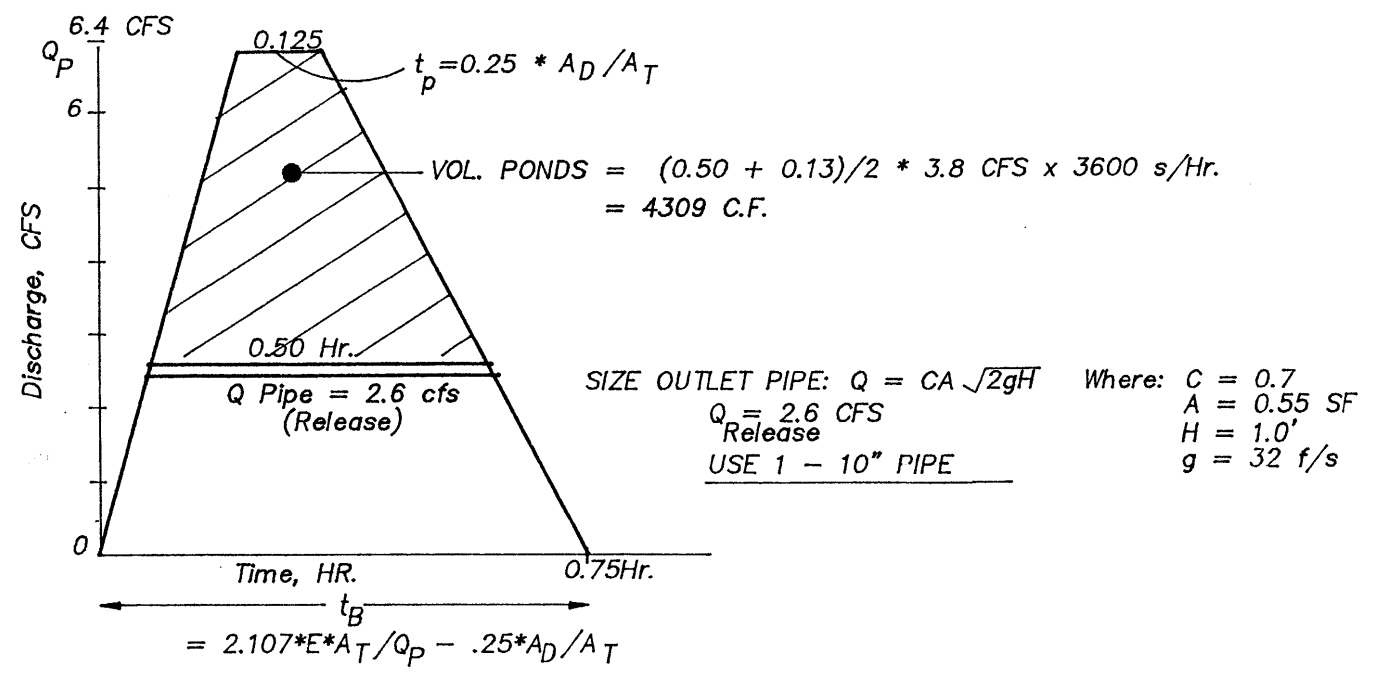
DETERMINE LAND TREATMENTS, PEAK DISCHARGE AND VOLUMETRIC DISCHARGE	AREA	LAND TREATMENT	Q_{PEAK}	E
UNDEVELOPED	-----	A	1.56[0.38]	0.53[0.13]
LANDSCAPING / PONDING AREA	0.21 Ac.(13%)	B	2.28[0.95]	0.78[0.28]
GRAVEL & COMPACTED SOIL	0.64 Ac.(37%)	C	3.14[1.71]	1.13[0.52]
ROOF - PAVEMENT	0.84 Ac.(50%)	D	4.70[3.14]	2.12[1.34]
	1.69 Ac.			

THEREFORE: $E_{WEIGHTED} = 1.579$ in.[0.898] & $Q_{100} = 6.4$ CFS VOLUME 100 = 9887 CF $Q_{10} = 3.9$ CFS VOLUME 10 = 5509 CF

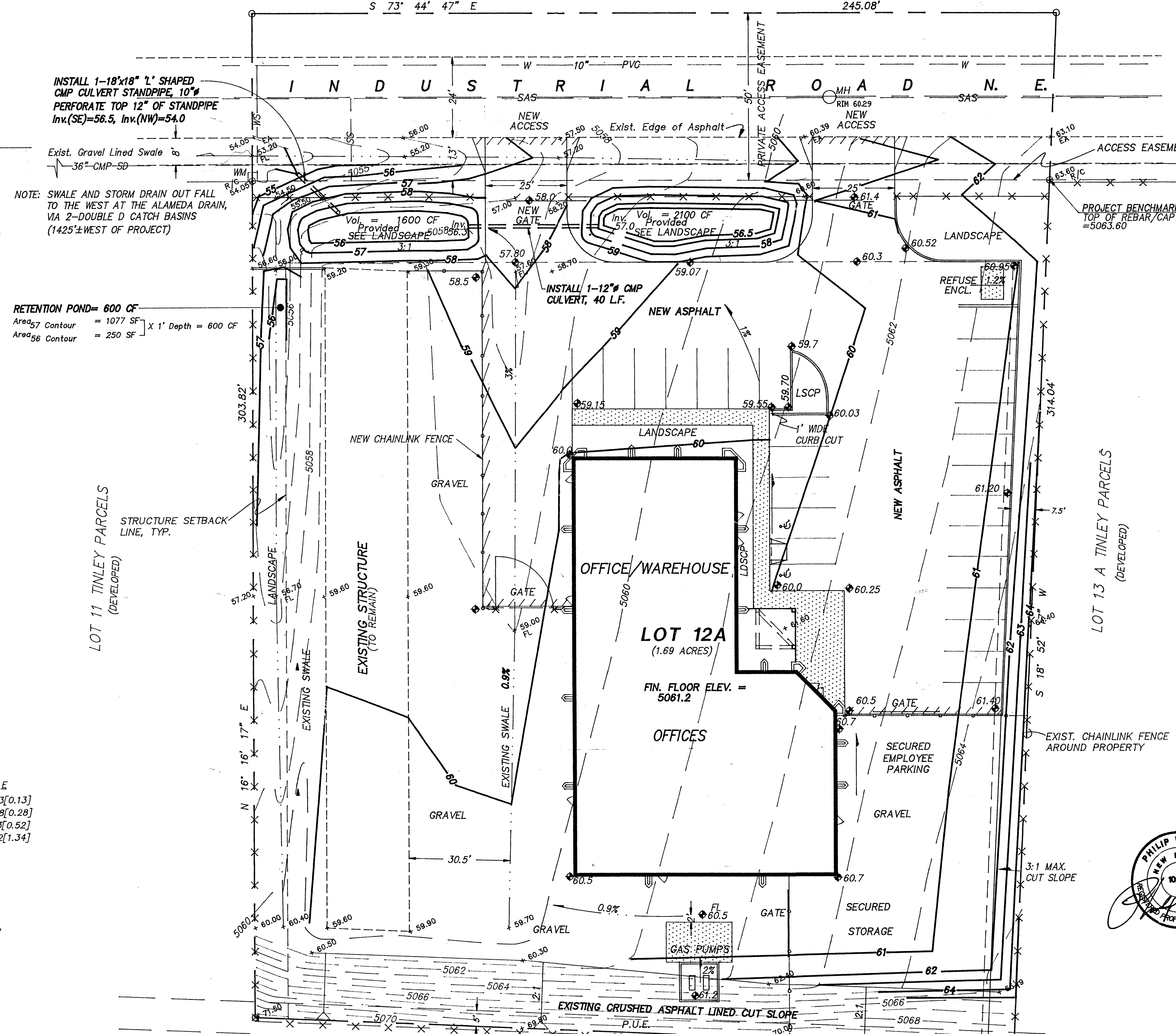
SIZE REQUIRED DETENTION POND

SINCE A DOWNSTREAM STORM DRAIN SYSTEM EXISTS, AND CAPACITY EXISTS FOR EXISTING CONDITION, RECOMMEND PONDING THE DIFFERENCE OF VOLUME DEVELOPED - VOLUME HISTORIC

DETENTION POND PER HYDROGRAPH & DPM, Section A.8 STORAGE VOLUME (Required) = VOLUME AREA ABOVE ALLOWABLE RELEASE



CALCULATE GRADED DETENTION PONDS:			
Area ₅₉ Contour	= 1259 SF	X 2' Depth = 1850 CF	
Area ₅₇ Contour	= 592 SF	X 0.5' Depth = 250 CF	
Area _{56.5} Contour	= 415 SF		
Area ₅₈ Contour	= 1190 SF	X 2' Depth = 1600 CF	
Area ₅₆ Contour	= 413 SF		
Total Detention Ponds (2) = 2100 + 1600 = 3700 CF + Retention (See Plan) = 4300 CF...OK			



VICINITY MAP ZONE G-15
1" = 750'

NOTES

1. ALL WORK WITHIN THE RIGHT-OF-WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECS. FOR PUBLIC WORKS CONSTRUCTION, 6TH EDITION W/ UPDATES.
2. AN EXCAVATION/CONSTRUCTION PERMIT IS REQUIRED BEFORE BEGINNING ANY WORK WITHIN ACCESS EASEMENT. AN APPROVED COPY OF THIS PLAN MUST BE SUBMITTED AT THE TIME OF APPLICATION.
3. 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.
4. CONTRACTOR SHALL ENSURE THAT NO SITE SOILS/SEDIMENT OR SILT ENTER THE RIGHT-OF-WAY DURING CONSTRUCTION.
5. REVEGETATE ALL AREAS DISTURBED DUE TO CONSTRUCTION PER CITY OF ALBUQ. SPEC. 1011, NATIVE SEED MIX.
6. MAXIMUM SITE GRADING WITHOUT EROSION PROTECTION: 3 HORIZONTAL TO 1 VERTICAL, 3:1. STOCKPILE EXISTING GRAVEL, REGRADE, AND REPLACE GRAVEL IN PROPOSED DRIVING/PONDING AREAS.

LEGEND

EXIST. SPOT ELEVATION	+24.0
EXIST. CONTOUR	-10-
NEW SPOT ELEVATION	+24.0
NEW CONTOUR	-12-
EXIST. EDGE OF ROAD	---
NEW SWALE	---
DRAINAGE DIRECTION	---
NEW HEADER, CURB (0.5' HEIGHT)	---
EDGE OF GRAVEL	EG
EDGE OF ASPHALT	EA
EXISTING POWER POLE	PP
TOP OF ASPHALT, EXISTING	TA

PROJECT DATA

LEGAL DESCRIPTION
LOT 12A OF TINLEY PARCELS, BERNALILLO COUNTY NEW MEXICO, PLAT FILED 1990.

PROJECT BENCHMARK
NORTHEAST EASEMENT CORNER MARKED BY REBAR/CAP, ELEV. = 5063.60, AS TIED TO CITY SAS MH # 671, LOCATED WITHIN INDUSTRIAL ROAD, 90'± EAST OF PROJECT.

TOPOGRAPHIC DESIGN SURVEY
PERFORMED BY CLARK CONSULTING ENGINEERS, DATE 5/14/01

Clark Consulting Engineers			
19 Ryan Road Edgewood, New Mexico 87015			
Tel: (505) 281-2444		Fax: (505) 281-2444	
DATE	REVISION	LOT 12A, TINLEY PARCELS BERNALILLO COUNTY NEW MEXICO HIGH DESERT ROOFING OFFICE BUILDING	
		Grading & Drainage Plan	
DESIGNED BY: PWC	DRAWN BY: CCE	JOB #: HD ROOF	1 OF 1
CHECKED BY: PWC	DATE: 5/14/01	FILE #: G/D	

DATE	7/17/97	FILE	7. 0/0
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