

BM: ACS 1-3/4" DISK, STAMPED
 "ACS BM, 9-M11"
 WNW CURB RETURN OF COORS BLVD. SW & HUSEMAN
 PLACE, SW
 BM ELV. = 4954.83 (NGVD29)

TBM: REBAR W/CAP 'PLS 8911'
 SW CORNER LOT 8, COORS-ARENAL INDUSTRIAL PARK
 TBM ELV. = 4983.35' (NGVD29)

- Legend**
- EXISTING SECURITY FENCE
 - NEW SECURITY FENCE
 - EXISTING ELEV. CONTOUR
 - PROPOSED ELEV. CONTOUR
 - EXISTING TOP OF CURB AND FLOWLINE ELEVATIONS
 - PROPOSED TOP OF CONCRETE AND FLOWLINE ELEVATIONS
 - PROPOSED SPOT ELEVATION
 - FINISHED FLOOR ELEVATION
 - DIRECTION OF FLOW
 - PROPOSED BIKE RACK
 - HC ACCESSIBLE SIGN
 - DRAINAGE BASIN BOUNDARY
 - CRUSHER FINES DRIVEWAY
 - CONCRETE SIDEWALK

- KEYED NOTES:**
1. PROPOSED BUILDING.
 2. 5" SIDEWALK W/ TURNED DOWN CURB (1'-2").
 3. CRUSHER FINES DRIVEWAY.
 4. STANDARD REFUSE BIN ENCLOSURE.
 5. 6" O.D. STEEL PIPE, CONCRETE FILLED BOLLARDS, ENCASED IN 12" CONCRETE AND EMBEDDED 2'-0", TYPICAL ALL OVERHEAD DOORS AND TRASH BIN ENCLOSURE.
 6. RETENTION POND 1 (VOLUME = 7,872 ft^3).
 7. RETENTION POND 2 (VOLUME = 3,141 ft^3).
 8. CONSTRUCT CONCRETE DRIVEPAD PER COA STD DWG #2425. MATCH EXISTING CONCRETE AND ASPHALT ELEVATIONS WHERE REQUIRED, ASSURE SMOOTH TRANSITION.
 9. RELOCATE SECURITY FENCE AND GATE OUTSIDE 10 FT PUBLIC UTILITY EASEMENT.
 10. CONNECT DOWNSPOUT TO 4" DIA. HDPE SMOOTH WALL PIPE. EXTEND TO RETENTION POND (PROVIDE 1' MIN. COVER).
 11. CONSTRUCT 6 FT CURB TYPE SIDEWALK PER COA STD DWG #2430.

CERTIFICATION WITH VERIFICATION BY ENGINEER OF RECORD

I, JAMES L. HEWITT, JR., NMPE 6871, OF THE FIRM HEWITT ENGINEERING & ENVIRONMENTAL CONSULTANTS, HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 10/24/05. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY ME OR UNDER MY DIRECT SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND IS INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THE PROJECT. ENGINEERS RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

James L. Hewitt, Jr.
 JAMES L. HEWITT, JR., P.E. # 6871
 DATE 10/08/06

THE SUBJECT PROPERTY IS LOCATED NEAR A FORMER LANDFILL. DUE TO THE SUBJECT PROPERTY BEING NEAR A FORMER LANDFILL, CERTAIN PRECAUTIONARY MEASURES MAY NEED TO BE TAKEN TO ENSURE THE HEALTH AND SAFETY OF THE PUBLIC. RECOMMENDATIONS MADE BY A PROFESSIONAL ENGINEER WITH EXPERTISE IN LANDFILLS AND LANDFILL GAS ISSUES (AS REQUIRED BY THE MOST CURRENT VERSION OF THE INTERIM GUIDELINES FOR DEVELOPMENT WITHIN CITY DESIGNATED LANDFILL BUFFER ZONES) SHALL BE CONSIDERED PRIOR TO DEVELOPMENT OF THE SITE.

ENGINEER'S CERTIFICATION:

THE ENGINEER HAS PERSONALLY VISITED AND INSPECTED THE SITE. NO GRADING, FILLING, OR EXCAVATIONS HAVE OCCURRED AFTER THE TOPOGRAPHIC SURVEY WAS COMPLETED ON AUGUST 29, 2005.

James L. Hewitt, Jr.
 JAMES L. HEWITT, JR., P.E. # 6871
 DATE 10/24/05

LEGAL DESCRIPTION

Lot 8, Coors-Arenal Industrial Park Subdivision (City of Albuquerque, New Mexico).

FLOOD HAZARD ZONE

Lot 8 is located in Flood Hazard Zone X (i.e., areas of 100-year flood with average depths of less than 1 foot) designated on the Federal Emergency Management Agency's (FEMA's) Flood Insurance Rate Map Panel No. 35001C0337E (November 19, 2003).

DRAINAGE ANALYSIS

REFERENCE: City of Albuquerque, Development Process Manual -Vol. 2, Section 22.2 - Hydrology, January, 1993.

Principal Design Storm: 100-year 6-hour event

Precipitation Zone 1 (Table A-1)

Excess Precipitation (Table A-8):
 $E_1 = 0.44$ in (Land Treatment 'A'), $E_2 = 0.67$ in (Land Treatment 'B'), $E_3 = 0.99$ in (Land Treatment 'C'), & $E_4 = 1.97$ in (Land Treatment 'D')

Peak Discharge (Table A-9):
 $Q_{P1} = 1.29 \text{ ft}^3/\text{sec-acre}$ (Land Treatment 'A')
 $Q_{P2} = 2.03 \text{ ft}^3/\text{sec-acre}$ (Land Treatment 'B')
 $Q_{P3} = 2.87 \text{ ft}^3/\text{sec-acre}$ (Land Treatment 'C')
 $Q_{P4} = 4.37 \text{ ft}^3/\text{sec-acre}$ (Land Treatment 'D')

On-Site 'Existing' Condition (Lot 8):

Lot 8 = 46,233 $\text{ft}^2 \times 1 \text{ acre}/43,560 \text{ ft}^2 = 1.06 \text{ acres}$
 100% Land Treatment 'C' (Table A-4)

$V_{360} = 0.99 \text{ in} \times 1.06 \text{ acres} \times 1 \text{ ft}/12 \text{ in}$
 $= 0.088 \text{ acre-ft} \times 43,560 \text{ ft}^2/\text{acre}$
 $= 3,814 \text{ ft}^3$

Total $Q_P = 2.87 \text{ ft}^3/\text{sec-acre} \times 1.06 \text{ acres}$
 $= 3.05 \text{ ft}^3/\text{sec}$

On-Site 'Post Development' Condition (Lot 8):

Basin 1 = 28,665 $\text{ft}^2 \times 1 \text{ acre}/43,560 \text{ ft}^2 = 0.66 \text{ acres}$
 90.80% Land Treatment 'C', 9.20% Land Treatment 'D' (Table A-4)

Weighted $E = ((E_3 \times 0.60 \text{ acres}) + (E_4 \times 0.06 \text{ acres}))/0.66 \text{ acres}$
 $= 1.08 \text{ in}$

$V_{360} = (1.08 \text{ in} \times 0.66 \text{ acres}) \times 1 \text{ ft}/12 \text{ in}$
 $= 0.059 \text{ acre-ft} \times 43,560 \text{ ft}^2/\text{acre}$
 $= 2,580 \text{ ft}^3$

Total $Q_P = (Q_{P3} \times 0.60 \text{ acres}) + (Q_{P4} \times 0.06 \text{ acres})$
 $= 1.98 \text{ ft}^3/\text{sec}$

Basin 2 = 17,162 $\text{ft}^2 \times 1 \text{ acre}/43,560 \text{ ft}^2 = 0.39 \text{ acres}$
 51.09% Land Treatment 'C', 48.91% Land Treatment 'D' (Table A-4)

Weighted $E = ((E_3 \times 0.20 \text{ acres}) + (E_4 \times 0.19 \text{ acres}))/0.39 \text{ acres}$
 $= 1.47 \text{ in}$

$V_{360} = (1.47 \text{ in} \times 0.39 \text{ acres}) \times 1 \text{ ft}/12 \text{ in}$
 $= 0.048 \text{ acre-ft} \times 43,560 \text{ ft}^2/\text{acre}$
 $= 2,101 \text{ ft}^3$

Total $Q_P = (Q_{P3} \times 0.20 \text{ acres}) + (Q_{P4} \times 0.19 \text{ acres})$
 $= 1.42 \text{ ft}^3/\text{sec}$

AREAS OF DISTURBANCE WILL BE REVEGETATED WITH NATIVE GRASSES

Off-Site 'Existing' Condition:

Offsite Drainage Basin = 24,238 $\text{ft}^2 \times 1 \text{ acre}/43,560 \text{ ft}^2 = 0.56 \text{ acres}$
 100% Land Treatment 'C' (Table A-4)

$V_{360} = 0.99 \text{ in} \times 0.56 \text{ acres} \times 1 \text{ ft}/12 \text{ in}$
 $= 0.046 \text{ acre-ft} \times 43,560 \text{ ft}^2/\text{acre}$
 $= 2,000 \text{ ft}^3$

Total $Q_P = 2.87 \text{ ft}^3/\text{sec-acre} \times 0.56 \text{ acres}$
 $= 1.60 \text{ ft}^3/\text{sec}$

Retention Pond 1 Volume (Required):

$V_{10days} = V_{360} + A_D (P_{10days} - P_{360})/12 \text{ in}/\text{ft}$
 $= (2,580 \text{ ft}^3 + 2,000 \text{ ft}^3) + ((0.06 \text{ acre-ft} (3.67 - 2.2))/12) \times 43,560 \text{ ft}^2/\text{acre}$
 $= 4,903 \text{ ft}^3$

Retention Pond 2 Volume (Required):

$V_{10days} = V_{360} + A_D (P_{10days} - P_{360})/12 \text{ in}/\text{ft}$
 $= (2,101 \text{ ft}^3 + ((0.19 \text{ acre-ft} (3.67 - 2.2))/12) \times 43,560 \text{ ft}^2/\text{acre})$
 $= 3,129 \text{ ft}^3$

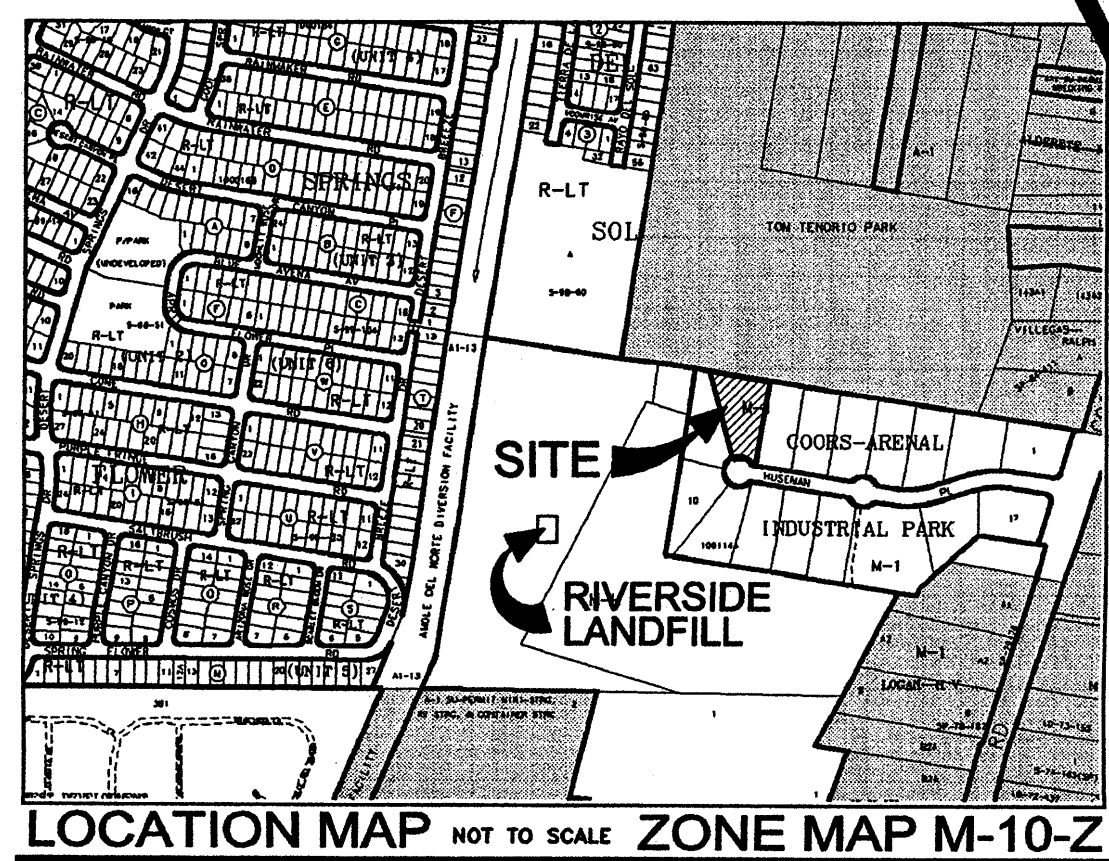
RECEIVED
 OCT 10 2006
 HYDROLOGY SECTION

HEWITT ENGINEERING & ENVIRONMENTAL CONSULTANTS
 6616 CRENSHAW ST., NW ALBUQUERQUE, NM 87120 TEL: (505) 899-3195

PROFESSIONAL AUTO WHOLESALE
 7011 HUSEMAN PLACE, SW
 LOT 8, COORS-ARENAL INDUSTRIAL PARK
 CITY OF ALBUQUERQUE, NEW MEXICO

SIZE	FSCM NO.	DWG NO.	REV
D		ZAMORA05-002-GRADING_PLAN_R1.dwg	1

SCALE 1"=20' DRAWN BY: RG/JLH SHEET 1 OF 1



20' PUBLIC WATERLINE EASEMENT
FILED 10/30/01 DOC#2001128762.
IN BK.-A-26, PG-6989.

GENERAL NOTES:

- ADD 4900 FEET TO FINISHED FLOOR AND SPOT ELEVATIONS.
- FOR TOP OF CONCRETE SLABS AND TOP OF FINISH GRADE SEE: FLOOR PLAN AND FOUNDATION PLAN DETAILS AND EXTERIOR WALL SECTIONS IN BUILDING PERMIT PLAN SET.
- CONTRACTOR SHALL OBTAIN TOPSOIL DISTURBANCE AND EXCAVATION/CONSTRUCTION PERMITS PRIOR TO BEGINNING WORK. AN APPROVED COPY OF THIS PLAN MUST BE SUBMITTED WITH PERMIT APPLICATIONS.
- ALL WORK SHOWN ON THIS PLAN, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION (AS AMENDED) AND IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL LAWS, RULES, AND REGULATIONS.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR SHALL REQUEST LINE LOCATING SERVICE (260-1990) FOR EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT IT CAN BE RESOLVED WITH MINIMUM DELAY.
- BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
- THE OWNER OF THE PROPERTY SERVED IS RESPONSIBLE FOR MAINTENANCE OF THESE FACILITIES.
- THE CONTRACTOR IS RESPONSIBLE FOR KEEPING RUNOFF ONSITE AND REMOVAL OF SEDIMENT TRANSPORTED ONTO ADJACENT RIGHT-OF-WAY AND/OR PROPERTIES DURING CONSTRUCTION ACTIVITIES.

RETENTION POND VOLUMES

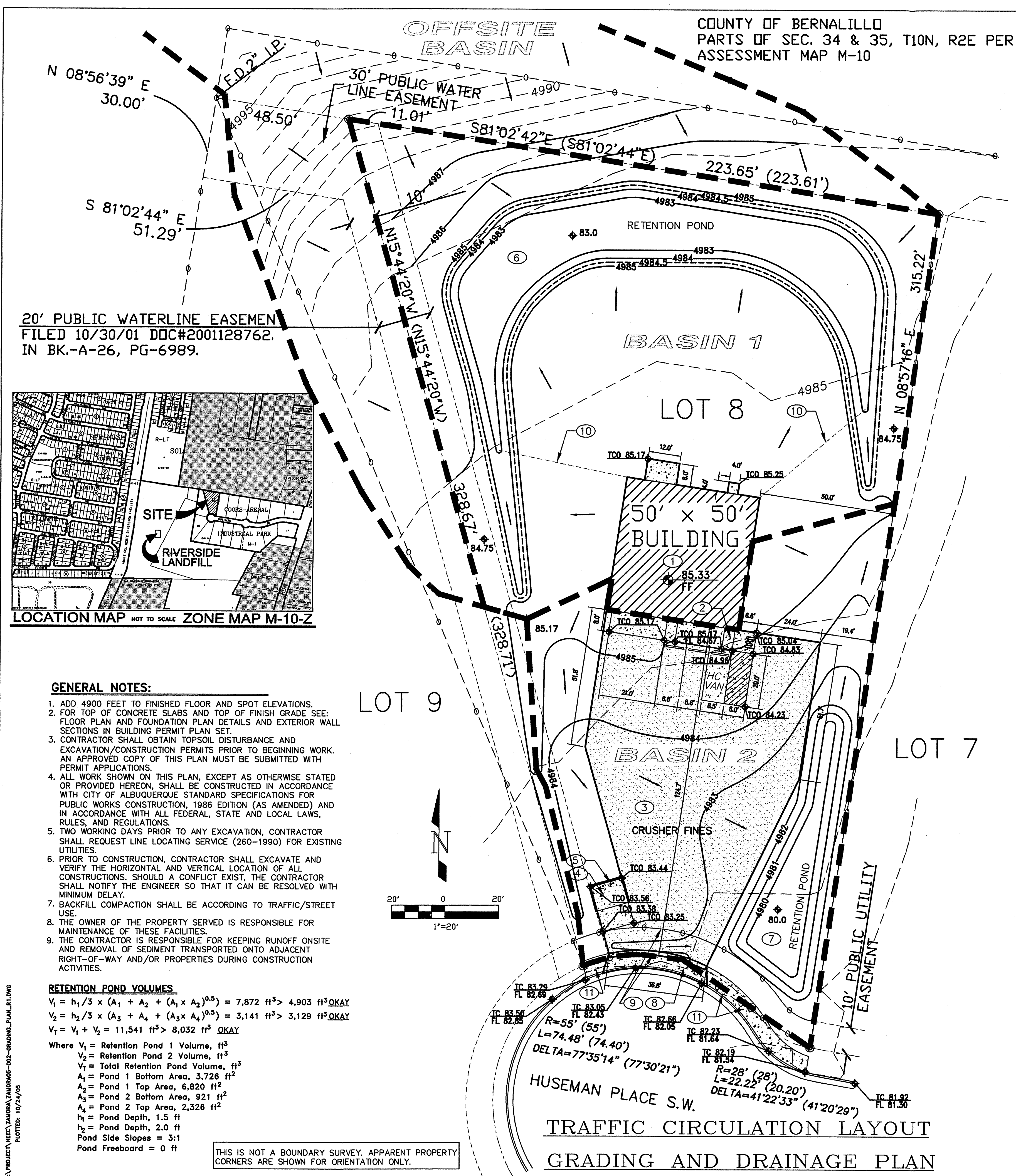
$$V_1 = h_1/3 \times (A_1 + A_2 + (A_1 \times A_2)^{0.5}) = 7,872 \text{ ft}^3 > 4,903 \text{ ft}^3 \text{ OKAY}$$

$$V_2 = h_2/3 \times (A_3 + A_4 + (A_3 \times A_4)^{0.5}) = 3,141 \text{ ft}^3 > 3,129 \text{ ft}^3 \text{ OKAY}$$

$$V_T = V_1 + V_2 = 11,541 \text{ ft}^3 > 8,032 \text{ ft}^3 \text{ OKAY}$$

Where V_1 = Retention Pond 1 Volume, ft^3
 V_2 = Retention Pond 2 Volume, ft^3
 V_T = Total Retention Pond Volume, ft^3
 A_1 = Pond 1 Bottom Area, 3,726 ft^2
 A_2 = Pond 1 Top Area, 6,820 ft^2
 A_3 = Pond 2 Bottom Area, 921 ft^2
 A_4 = Pond 2 Top Area, 2,326 ft^2
 h_1 = Pond Depth, 1.5 ft
 h_2 = Pond Depth, 2.0 ft
Pond Side Slopes = 3:1
Pond Freeboard = 0 ft

THIS IS NOT A BOUNDARY SURVEY. APPARENT PROPERTY CORNERS ARE SHOWN FOR ORIENTATION ONLY.



BM: ACS 1-3/4" DISK, STAMPED
"ACS BM, 9-M11"
WNW CURB RETURN OF COORS BLVD. SW & HUSEMAN
PLACE, SW
BM ELV. = 4954.83 (NGVD29)

TBM: REBAR W/CAP 'PLS 8911'
SW CORNER LOT 8, COORS-ARENAL INDUSTRIAL PARK
TBM ELV. = 4983.35' (NGVD29)

Legend

- EXISTING SECURITY FENCE
- NEW SECURITY FENCE
- 5200 --- EXISTING ELEV. CONTOUR
- 4980 --- PROPOSED ELEV. CONTOUR
- TC 85.17
FL 84.67 EXISTING TOP OF CURB
AND FLOWLINE ELEVATIONS
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FF FINISHED FLOOR ELEVATION
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KEYED NOTES:

- PROPOSED BUILDING.
- 5" SIDEWALK W/ TURNED DOWN CURB (1'-2").
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- 6" O.D. STEEL PIPE, CONCRETE FILLED BOLLARDS, ENCASED IN 12" CONCRETE AND EMBEDDED 2'-0", TYPICAL ALL OVERHEAD DOORS AND TRASH BIN ENCLOSURE.
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- CONSTRUCT CONCRETE DRIVEPAD PER COA STD DWG #2425. MATCH EXISTING CONCRETE AND ASPHALT ELEVATIONS WHERE REQUIRED, ASSURE SMOOTH TRANSITION.
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- CONNECT DOWNSPOUT TO 4" DIA. HDPE SMOOTH WALL PIPE, EXTEND TO RETENTION POND (PROVIDE 1' MIN. COVER).
- CONSTRUCT 6 FT CURB TYPE SIDEWALK PER COA STD DWG #2430.

OFF-STREET PARKING

PROPOSED BUILDINGS:	ONE 2,500 SF BUILDING
PARKING REQUIREMENT:	
1 P.S. PER 1000 SF OF NET LEASE AREA	2 PARKING SPACES
NUMBER OF SPACES PROVIDED:	2 PARKING SPACES
NUMBER OF HC SPACES REQUIRED:	1 VAN ACCESSIBLE P.S.
1 SPACE/1-25 REQUIRED P.S.	
NUMBER OF HC SPACES PROVIDED:	1 VAN ACCESSIBLE P.S.
NUMBER OF BIKE SPACES REQUIRED:	1 P.S.
NUMBER OF BIKE SPACES PROVIDED:	1 P.S.
STANDARD SPACE DIMENSIONS:	8.6' x 20'
HC ACCESSIBLE SPACE DIMENSIONS:	8.5' x 20' with 8' x 20' delineated aisle.

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JAMES L. HEWITT, JR., (P.E. # 687)

DATE

LEGAL DESCRIPTION

Lot 8, Coors-Arenal Industrial Park Subdivision (City of Albuquerque, New Mexico).

FLOOD HAZARD ZONE

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REFERENCE: City of Albuquerque, Development Process Manual -Vol. 2, Section 22.2 - Hydrology, January, 1993.

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 $Q_{p3} = 2.87 \text{ ft}^3/\text{sec-} \text{acre}$ (Land Treatment 'C')
 $Q_{p4} = 4.37 \text{ ft}^3/\text{sec-} \text{acre}$ (Land Treatment 'D')

On-Site 'Existing' Condition (Lot 8):

Lot 8 = 46,233 ft^2 x 1 acre/43,560 ft^2 = 1.06 acres
100% Land Treatment 'C' (Table A-4)

$V_{360} = 0.99 \text{ in} \times 1.06 \text{ acres} \times 1 \text{ ft}/12 \text{ in}$
= 0.088 acre-ft x 43,560 ft^2/acre
= 3,814 ft^3

Total $Q_p = 2.87 \text{ ft}^3/\text{sec-} \text{acre} \times 1.06 \text{ acres}$
= 3.05 ft^3/sec

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Basin 1 = 28,665 ft^2 x 1 acre/43,560 ft^2 = 0.66 acres
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Weighted $E = ((E_3 \times 0.60 \text{ acres}) + (E_4 \times 0.06 \text{ acres}))/0.66 \text{ acres}$
= 1.08 in

$V_{360} = (1.08 \text{ in} \times 0.66 \text{ acres}) \times 1 \text{ ft}/12 \text{ in}$
= 0.059 acre-ft x 43,560 ft^2/acre
= 2,580 ft^3

Total $Q_p = (Q_{p3} \times 0.60 \text{ acres}) + (Q_{p4} \times 0.06 \text{ acres})$
= 1.98 ft^3/sec

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51.09% Land Treatment 'C', 48.91% Land Treatment 'D' (Table A-4)

Weighted $E = ((E_3 \times 0.20 \text{ acres}) + (E_4 \times 0.19 \text{ acres}))/0.39 \text{ acres}$
= 1.47 in

$V_{360} = (1.47 \text{ in} \times 0.39 \text{ acres}) \times 1 \text{ ft}/12 \text{ in}$
= 0.048 acre-ft x 43,560 ft^2/acre
= 2,101 ft^3

Total $Q_p = (Q_{p3} \times 0.20 \text{ acres}) + (Q_{p4} \times 0.19 \text{ acres})$
= 1.42 ft^3/sec

AREAS OF DISTURBANCE WILL BE REVEGETATED WITH NATIVE GRASSES

Off-Site 'Existing' Condition:

Off-Site Drainage Basin = 24,238 ft^2 x 1 acre/43,560 ft^2 = 0.56 acres
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= 2,000 ft^3

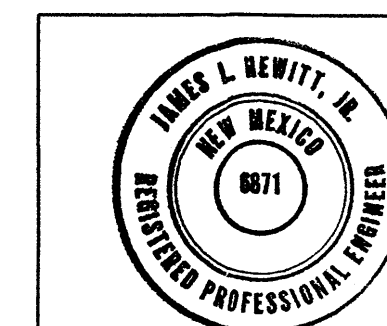
Total $Q_p = 2.87 \text{ ft}^3/\text{sec-} \text{acre} \times 0.56 \text{ acres}$
= 1.60 ft^3/sec

Retention Pond 1 Volume (Required):

$V_{10\text{days}} = V_{360} + A_D (P_{10\text{days}} - P_{360})/12 \text{ in}/\text{ft}$
= (2,580 ft^3 + 2,000 ft^3) +
((0.06 acre-ft (3.67 - 2.2)/12) x 43,560 ft^2/acre)
= 4,903 ft^3

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= (2,101 ft^3 + ((0.19 acre-ft (3.67 - 2.2)/12) x 43,560 ft^2/acre)
= 3,129 ft^3

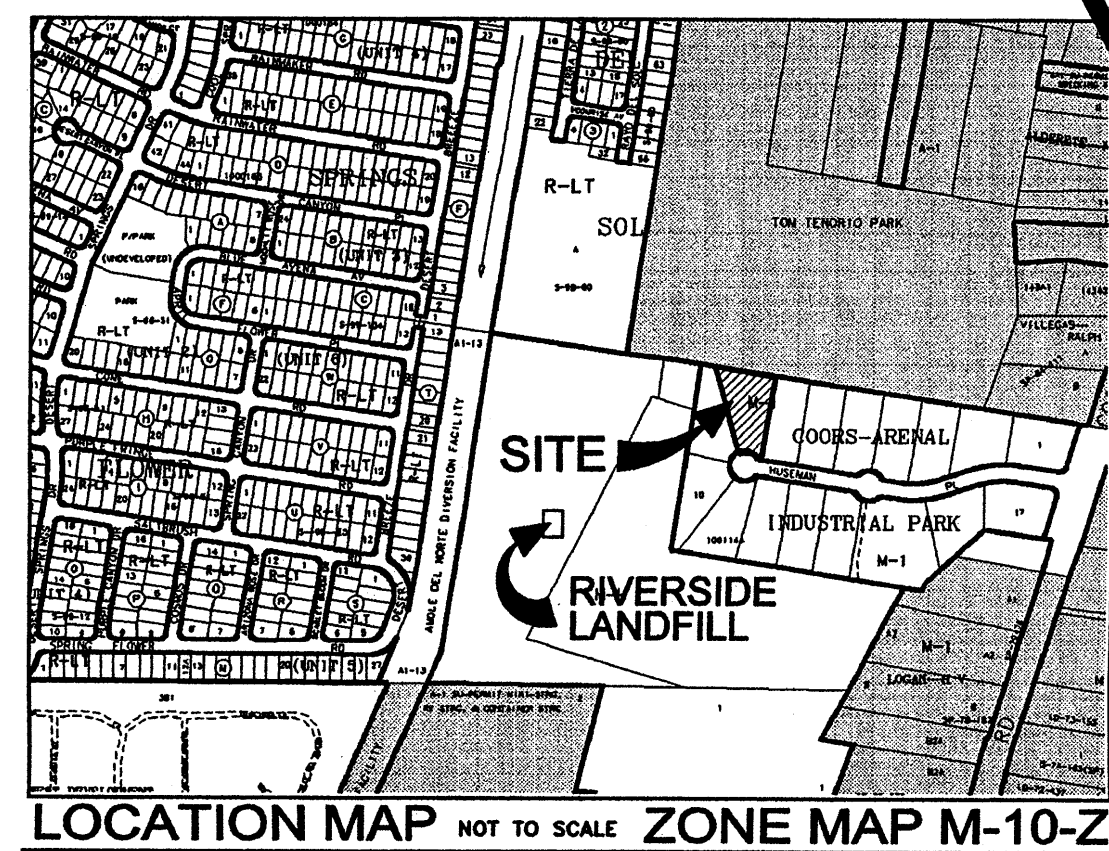


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5615 CIBOLA ST., NW ALBUQUERQUE, NM 87120 TEL: (505) 899-5195
PROFESSIONAL AUTO WHOLESALE
7011 HUSEMAN PLACE, SW
LOT 8, COORS-ARENAL INDUSTRIAL PARK
CITY OF ALBUQUERQUE, NEW MEXICO

SIZE D	FSCM NO.	DWG NO. ZAMORA05-002-GRADING_PLAN_R1.dwg	REV 1
SCALE 1"=20'	DRAWN BY: RG/JLH	SHEET	

OCT 25 2005

HYDROLOGY



20' PUBLIC WATERLINE EASEMENT
FILED 10/30/01 DOC#2001128762.
IN BK.-A-26, PG-6989.

GENERAL NOTES:

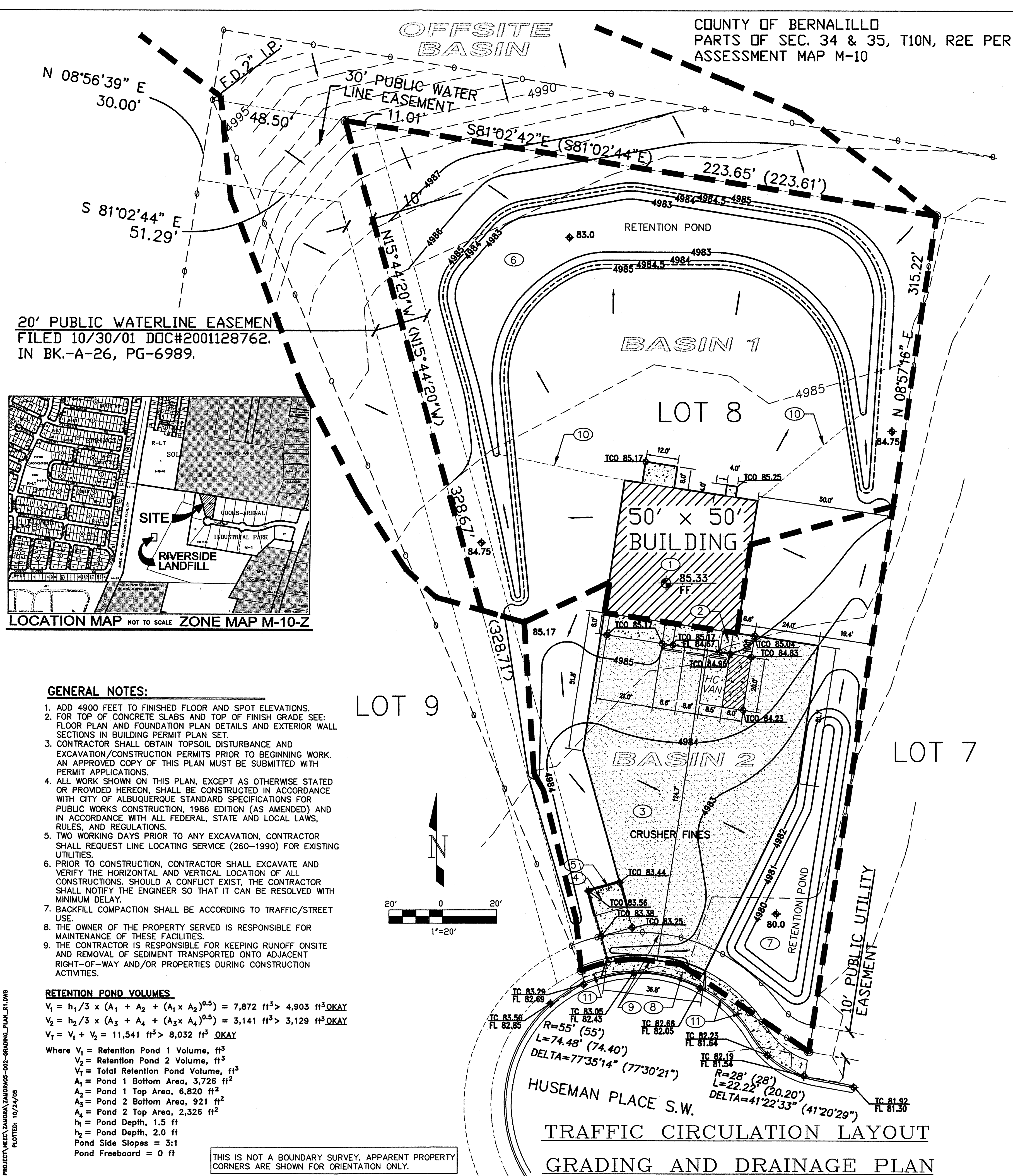
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RETENTION POND VOLUMES

$$V_1 = h_1/3 \times (A_1 + A_2 + (A_1 \times A_2)^{0.5}) = 7,872 \text{ ft}^3 > 4,903 \text{ ft}^3 \text{ OKAY}$$
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Where V_1 = Retention Pond 1 Volume, ft^3
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 h_2 = Pond Depth, 2.0 ft
Pond Side Slopes = 3:1
Pond Freeboard = 0 ft

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BM: ACS 1-3/4" DISK, STAMPED
"ACS BM, 9-M11"
WNW CURB RETURN OF COORS BLVD. SW & HUSEMAN
PLACE, SW
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TBM: REBAR W/CAP 'PLS 8911'
SW CORNER LOT 8, COORS-ARENAL INDUSTRIAL PARK
TBM ELV. = 4983.35' (NGVD29)

Legend

- EXISTING SECURITY FENCE
- NEW SECURITY FENCE
- EXISTING ELEV. CONTOUR
- PROPOSED ELEV. CONTOUR
- EXISTING TOP OF CURB AND FLOWLINE ELEVATIONS
- PROPOSED TOP OF CONCRETE AND FLOWLINE ELEVATIONS
- PROPOSED SPOT ELEVATION
- FINISHED FLOOR ELEVATION
- DIRECTION OF FLOW
- PROPOSED BIKE RACK
- HC ACCESSIBLE SIGN
- DRAINAGE BASIN BOUNDARY
- CRUSHER FINES DRIVEWAY
- CONCRETE SIDEWALK

KEYED NOTES:

- PROPOSED BUILDING.
- 5" SIDEWALK W/ TURNED DOWN CURB (1'-2").
- CRUSHER FINES DRIVEWAY.
- STANDARD REFUSE BIN ENCLOSURE.
- 6" O.D. STEEL PIPE, CONCRETE FILLED BOLLARDS, ENCASED IN 12" CONCRETE AND EMBEDDED 2'-0", TYPICAL ALL OVERHEAD DOORS AND TRASH BIN ENCLOSURE.
- RETENTION POND 1 (VOLUME = 7,872 ft^3).
- RETENTION POND 2 (VOLUME = 3,141 ft^3).
- CONSTRUCT CONCRETE DRIVEPAD PER COA STD DWG #2425. MATCH EXISTING CONCRETE AND ASPHALT ELEVATIONS WHERE REQUIRED, ASSURE SMOOTH TRANSITION.
- RELOCATE SECURITY FENCE AND GATE OUTSIDE 10 FT PUBLIC UTILITY EASEMENT.
- CONNECT DOWNSPOUT TO 4" DIA. HDPE SMOOTH WALL PIPE. EXTEND TO RETENTION POND (PROVIDE 1' MIN. COVER).
- CONSTRUCT 6 FT CURB TYPE SIDEWALK PER COA STD DWG #2430.

OFF-STREET PARKING

PROPOSED BUILDINGS:	ONE 2,500 SF BUILDING
PARKING REQUIREMENT:	
1 P.S. PER 1000 SF OF NET LEASE AREA	2 PARKING SPACES
NUMBER OF SPACES PROVIDED:	2 PARKING SPACES
NUMBER OF HC SPACES REQUIRED:	1 VAN ACCESSIBLE P.S.
1 SPACE/1-25 REQUIRED P.S.	
NUMBER OF HC SPACES PROVIDED:	1 VAN ACCESSIBLE P.S.
NUMBER OF BIKE SPACES REQUIRED:	1 P.S.
NUMBER OF BIKE SPACES PROVIDED:	1 P.S.
STANDARD SPACE DIMENSIONS:	8.6' x 20'
HC ACCESSIBLE SPACE DIMENSIONS:	8.5' x 20' with 8' x 20' delineated aisle.

THE SUBJECT PROPERTY IS LOCATED NEAR A FORMER LANDFILL. DUE TO THE SUBJECT PROPERTY BEING NEAR A FORMER LANDFILL, CERTAIN PRECAUTIONARY MEASURES MAY NEED TO BE TAKEN TO ENSURE THE HEALTH AND SAFETY OF THE PUBLIC. RECOMMENDATIONS MADE BY A PROFESSIONAL ENGINEER WITH EXPERTISE IN LANDFILLS AND LANDFILL GAS ISSUES (AS REQUIRED BY THE MOST CURRENT VERSION OF THE INTERIM GUIDELINES FOR DEVELOPMENT WITHIN CITY DESIGNATED LANDFILL BUFFER ZONES) SHALL BE CONSIDERED PRIOR TO DEVELOPMENT OF THE SITE.

ENGINEER'S CERTIFICATION:

THE ENGINEER HAS PERSONALLY VISITED AND INSPECTED THE SITE. NO GRADING, FILLING, OR EXCAVATIONS HAVE OCCURRED AFTER THE TOPOGRAPHIC SURVEY WAS COMPLETED ON AUGUST 29, 2005.

JAMES L. HEWITT, JR., (P.E. # 687)

DATE

LEGAL DESCRIPTION

Lot 8, Coors-Arenal Industrial Park Subdivision (City of Albuquerque, New Mexico).

FLOOD HAZARD ZONE

Lot 8 is located in Flood Hazard Zone X (i.e., areas of 100-year flood with average depths of less than 1 foot) designated on the Federal Emergency Management Agency's (FEMA's) Flood Insurance Rate Map Panel No. 35001C0337E (November 19, 2003).

DRAINAGE ANALYSIS

REFERENCE: City of Albuquerque, Development Process Manual -Vol. 2, Section 22.2 - Hydrology, January, 1993.

Principal Design Storm: 100-year 6-hour event

Precipitation Zone 1 (Table A-1)

Excess Precipitation (Table A-8):

$E_1 = 0.44$ in (Land Treatment 'A'), $E_2 = 0.67$ in (Land Treatment 'B')
 $E_3 = 0.99$ in (Land Treatment 'C'), $E_4 = 1.97$ in (Land Treatment 'D')

Peak Discharge (Table A-9):

$Q_{P1} = 1.29 \text{ ft}^3/\text{sec-acre}$ (Land Treatment 'A')
 $Q_{P2} = 2.03 \text{ ft}^3/\text{sec-acre}$ (Land Treatment 'B')
 $Q_{P3} = 2.87 \text{ ft}^3/\text{sec-acre}$ (Land Treatment 'C')
 $Q_{P4} = 4.37 \text{ ft}^3/\text{sec-acre}$ (Land Treatment 'D')

On-Site 'Existing' Condition (Lot 8):

Lot 8 = 46,233 ft^2 x 1 acre/43,560 ft^2 = 1.06 acres
100% Land Treatment 'C' (Table A-4)

$V_{360} = 0.99$ in x 1.06 acres x 1 ft/12 in
= 0.088 acre-ft x 43,560 ft^2/acre
= 3,814 ft^3

Total $Q_p = 2.87 \text{ ft}^3/\text{sec-acre}$ x 1.06 acres
= 3.05 ft^3/sec

On-Site 'Post Development' Condition (Lot 8):

Basin 1 = 28,665 ft^2 x 1 acre/43,560 ft^2 = 0.66 acres
90.80% Land Treatment 'C', 9.20% Land Treatment 'D' (Table A-4)

Weighted $E = ((E_3 \times 0.60 \text{ acres}) + (E_4 \times 0.06 \text{ acres}))/0.66 \text{ acres}$
= 1.08 in

$V_{360} = (1.08 \text{ in} \times 0.66 \text{ acres}) \times 1 \text{ ft}/12 \text{ in}$
= 0.059 acre-ft x 43,560 ft^2/acre
= 2,580 ft^3

Total $Q_p = (Q_{P3} \times 0.60 \text{ acres}) + (Q_{P4} \times 0.06 \text{ acres})$
= 1.98 ft^3/sec

Basin 2 = 17,162 ft^2 x 1 acre/43,560 ft^2 = 0.39 acres
51.09% Land Treatment 'C', 48.91% Land Treatment 'D' (Table A-4)

Weighted $E = ((E_3 \times 0.20 \text{ acres}) + (E_4 \times 0.19 \text{ acres}))/0.39 \text{ acres}$
= 1.47 in

$V_{360} = (1.47 \text{ in} \times 0.39 \text{ acres}) \times 1 \text{ ft}/12 \text{ in}$
= 0.048 acre-ft x 43,560 ft^2/acre
= 2,101 ft^3

Total $Q_p = (Q_{P3} \times 0.20 \text{ acres}) + (Q_{P4} \times 0.19 \text{ acres})$
= 1.42 ft^3/sec

AREAS OF DISTURBANCE WILL BE REVEGETATED WITH NATIVE GRASSES

Off-Site 'Existing' Condition:

Offsite Drainage Basin = 24,238 ft^2 x 1 acre/43,560 ft^2 = 0.56 acres
100% Land Treatment 'C' (Table A-4)

$V_{360} = 0.99$ in x 0.56 acres x 1 ft/12 in
= 0.046 acre-ft x 43,560 ft^2/acre
= 2,000 ft^3

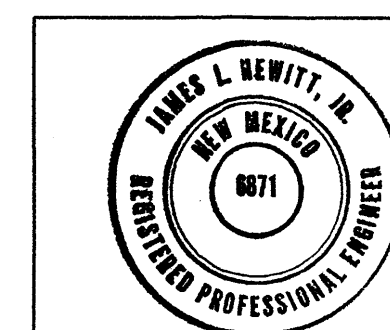
Total $Q_p = 2.87 \text{ ft}^3/\text{sec-acre}$ x 0.56 acres
= 1.60 ft^3/sec

Retention Pond 1 Volume (Required):

$$V_{10\text{days}} = V_{360} + A_p (P_{10\text{days}} - P_{360})/12 \text{ in/ft}$$
$$= (2,580 \text{ ft}^3 + 2,000 \text{ ft}^3) + ((0.06 \text{ acre-ft} (3.67 - 2.2)/12) \times 43,560 \text{ ft}^2/\text{acre})$$
$$= 4,903 \text{ ft}^3$$

Retention Pond 2 Volume (Required):

$$V_{10\text{days}} = V_{360} + A_p (P_{10\text{days}} - P_{360})/12 \text{ in/ft}$$
$$= (2,101 \text{ ft}^3 + ((0.19 \text{ acre-ft} (3.67 - 2.2)/12) \times 43,560 \text{ ft}^2/\text{acre}))$$
$$= 3,129 \text{ ft}^3$$



HEWITT ENGINEERING & ENVIRONMENTAL CONSULTANTS
5615 CRENSHAW ST., NW ALBUQUERQUE, NM 87120 TEL: (505) 869-3105

PROFESSIONAL AUTO WHOLESALE
7011 HUSEMAN PLACE, SW
LOT 8, COORS-ARENAL INDUSTRIAL PARK
CITY OF ALBUQUERQUE, NEW MEXICO

SIZE	FSCM NO.	DWG NO.	REV
D		ZAMORA05-002-GRADING_PLAN_R1.dwg	1
SCALE	1"=20'	DRAWN BY: RG/JLH	SHEET

OCT 25 2005

HYDROLOGY SECTION

COUNTY OF BERNALILLO
PARTS OF SEC. 34 & 35, T10N, R2E PER
ASSESSMENT MAP M-10

BM: ACS 1-3/4" DISK, STAMPED
"ACS BM, 9-M11"
WNW CURB RETURN OF COORS BLVD. SW & HUSEMAN
PLACE, SW
BM ELV. = 4954.83 (NGVD29)

TBM: REBAR W/CAP 'PLS 8911'
SW CORNER LOT 8, COORS-ARENAL INDUSTRIAL PARK
TBM ELV. = 4983.35' (NGVD29)

Legend

- EXISTING SECURITY FENCE
- NEW SECURITY FENCE
- 5200 --- EXISTING ELEV. CONTOUR
- 4980 --- PROPOSED ELEV. CONTOUR
- TCO 85.17
FL 84.67 ◆ PROPOSED TOP OF CONCRETE
AND FLOWLINE ELEVATIONS
- 84.0 ◆ PROPOSED SPOT ELEVATION
- 85.33 ◆ FINISHED FLOOR ELEVATION
- DIRECTION OF FLOW
- ⌈⌋ PROPOSED BIKE RACK
- HC ACCESSIBLE SIGN, SEE DETAIL SHEET
- CRUSHER FINES DRIVEWAY
- CONCRETE SIDEWALK

KEYED NOTES:

- ① PROPOSED BUILDING.
- ② 5" SIDEWALK W/ TURNED DOWN CURB (1'-2").
- ③ CRUSHER FINES DRIVEWAY.
- ④ TRASH BIN.
- ⑤ 6" O.D. STEEL PIPE, CONCRETE FILLED BOLLARDS, ENCASED IN 12" CONCRETE ALL AROUND AND EMBEDDED 2'-0", TYPICAL ALL OVERHEAD DOORS AND TRASH BIN ENCLOSURE.
- ⑥ RETENTION POND 1 (VOLUME = 1,389 FT³).
- ⑦ RETENTION POND 2 (VOLUME = 7,152 FT³).
- ⑧ PROPOSED CONCRETE DRIVEPAD PER COA STD DWG #2425. MATCH EXISTING CONCRETE AND ASPHALT ELEVATIONS WHERE REQUIRED, ASSURE SMOOTH TRANSITION.
- ⑨ RELOCATE SECURITY FENCE AND GATE OUTSIDE 10 FT PUBLIC UTILITY EASEMENT.

OFF-STREET PARKING

PROPOSED BUILDINGS:	ONE 2,500 SF BUILDING
PARKING REQUIREMENT:	
1 P.S. PER 1000 SF OF NET LEASE AREA	2 PARKING SPACES
NUMBER OF SPACES PROVIDED:	2 PARKING SPACES
NUMBER OF HC SPACES REQUIRED:	1, VAN ACCESSIBLE, P.S.
1 SPACE/1-25 REQUIRED P.S.	
NUMBER OF HC SPACES PROVIDED:	1, VAN ACCESSIBLE, P.S.
NUMBER OF BIKE SPACES REQUIRED:	1 P.S.
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STANDARD SPACE DIMENSIONS:	8.6' x 20'
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ENGINEER'S CERTIFICATION:

THE ENGINEER HAS PERSONALLY VISITED AND INSPECTED THE SITE. NO GRADING, FILLING, OR EXCAVATIONS HAVE OCCURRED AFTER THE TOPOGRAPHIC SURVEY WAS COMPLETED ON AUGUST 29, 2005.

JAMES L. HEWITT, JR., P.E. # 6871

DATE

LEGAL DESCRIPTION

Lot 8, Coors_Arenal Industrial Park Subdivision (City of Albuquerque, New Mexico).

FLOOD HAZARD ZONE

Lot 8 is located in Flood Hazard Zone X (i.e., areas of 100-year flood with average depths of less than 1 foot) designated on the Federal Emergency Management Agency's (FEMA's) Flood Insurance Rate Map Panel No. 35001C0337E (November 19, 2003).

DRAINAGE ANALYSIS

REFERENCE: City of Albuquerque, Development Process Manual -Vol. 2, Section 22.2 - Hydrology, January, 1993.

Principal Design Storm: 100-year 6-hour event

Precipitation Zone 1 (Table A-1)

Excess Precipitation (Table A-8):

E₁ = 0.44 in (Land Treatment 'A'), E₂ = 0.67 in (Land Treatment 'B')
E₃ = 0.99 in (Land Treatment 'C'), & E₄ = 1.97 in (Land Treatment 'D')

Peak Discharge (Table A-9):

Q_{P1} = 1.29 ft³/sec-acre (Land Treatment 'A')
Q_{P2} = 2.03 ft³/sec-acre (Land Treatment 'B')
Q_{P3} = 2.87 ft³/sec-acre (Land Treatment 'C')
Q_{P4} = 4.37 ft³/sec-acre (Land Treatment 'D')

On-Site 'Existing' Condition (Lot 8):

Lot 8 Area = 46,233 ft² x 1 acre/43,560 ft² = 1.06 acres
100% Land Treatment 'C' (Table A-4)

V₃₆₀ = 0.99 in x 1.06 acres x 1 ft/12 in
= 0.088 acre-ft x 43,560 ft²/acre
= 3,814 ft³

Total Q_P = 2.87 ft³/sec-acre x 1.06 acres
= 3.05 ft³/sec

On-Site 'Post Development' Condition (Lot 8):

76.11% Land Treatment 'C', 23.89% Land Treatment 'D' (Table A-4)

AREAS OF DISTURBANCE WILL BE REVEGETATED WITH NATIVE GRASSES

Weighted E = ((E₃ x 0.81 acres) + (E₄ x 0.25 acres))/1.06 acres
= 1.22 in

V₃₆₀ = (1.22 in x 1.06 acres) x 1 ft/12 in
= 0.108 acre-ft x 43,560 ft²/acre
= 4,716 ft³

Total Q_P = (Q_{P3} x 0.81 acres) + (Q_{P4} x 0.25 acres)
= 3.43 ft³/sec

Off-Site 'Existing' Condition:

Offsite Drainage Basin Area = 24,238 ft² x 1 acre/43,560 ft²
= 0.56 acres

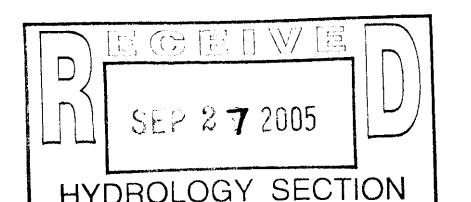
100% Land Treatment 'C' (Table A-4)

V₃₆₀ = 0.99 in x 0.56 acres x 1 ft/12 in
= 0.046 acre-ft x 43,560 ft²/acre
= 2,000 ft³

Total Q_P = 2.87 ft³/sec-acre x 0.56 acres
= 1.60 ft³/sec

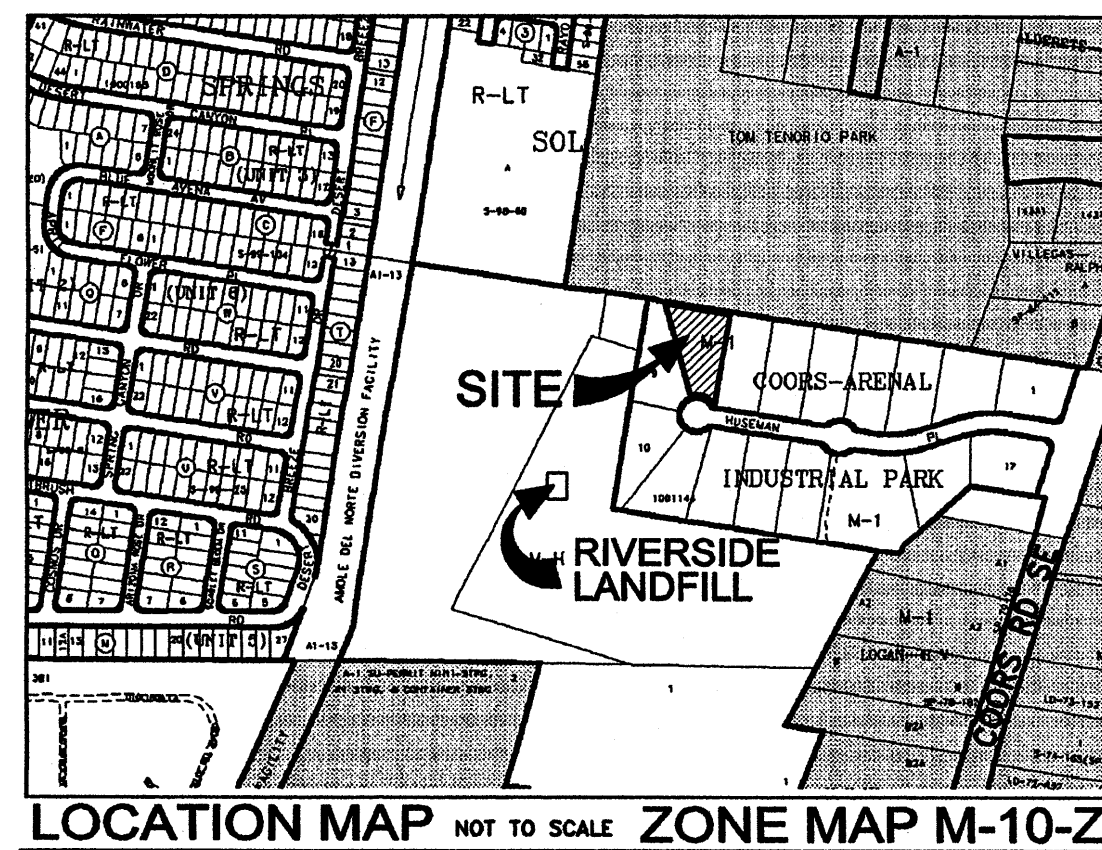
Retention Pond Volume (Required):

V_{10days} = V₃₆₀ + A_P (P_{10days} - P₃₆₀)/12 in/ft
= (4,716 ft³ + 2,000 ft³) +
((0.25 acre-ft (3.67 - 2.2)/12) x 43,560 ft²/acre)
= 8,069 ft³



HEWITT ENGINEERING & ENVIRONMENTAL CONSULTANTS			
6615 CREGG ST., NW ALBUQUERQUE, NM 87120 TEL: (505) 869-3195			
PROFESSIONAL AUTO WHOLESALE			
7011 HUSEMAN PLACE, SW			
LOT 8, COORS-ARENAL INDUSTRIAL PARK			
CITY OF ALBUQUERQUE, NEW MEXICO			
SIZE	FSCM NO.	DWG NO.	REV
D		ZAMORA05-002-GRADING_PLAN.dwg	
SCALE	1"=20'	DRAWN BY: RG/JLH	SHEET 1 OF 1

20' PUBLIC WATERLINE EASEMENT
FILED 10/30/01 DOC#2001128762.
IN BK.-A-26, PG-6989.



GENERAL NOTES:

1. ADD 4900 FEET TO FINISHED FLOOR AND SPOT ELEVATIONS.
2. FOR TOP OF CONCRETE SLABS AND TOP OF FINISH GRADE SEE: FLOOR PLAN AND FOUNDATION PLAN DETAILS AND EXTERIOR WALL SECTIONS IN BUILDING PERMIT PLAN SET.
3. CONTRACTOR SHALL OBTAIN TOPSOIL DISTURBANCE AND EXCAVATION/CONSTRUCTION PERMITS PRIOR TO BEGINNING WORK. AN APPROVED COPY OF THIS PLAN MUST BE SUBMITTED WITH PERMIT APPLICATIONS.
4. ALL WORK SHOWN ON THIS PLAN, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION (AS AMENDED) AND IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL LAWS, RULES, AND REGULATIONS.
5. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR SHALL REQUEST LINE LOCATING SERVICE (260-1990) FOR EXISTING UTILITIES.
6. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT IT CAN BE RESOLVED WITH MINIMUM DELAY.
7. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
8. THE OWNER OF THE PROPERTY SERVED IS RESPONSIBLE FOR MAINTENANCE OF THESE FACILITIES.
9. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING RUNOFF ONSITE AND REMOVAL OF SEDIMENT TRANSPORTED ONTO ADJACENT RIGHT-OF-WAY AND/OR PROPERTIES DURING CONSTRUCTION ACTIVITIES.

RETENTION POND VOLUMES

$$V_1 = h_1/3 \times (A_1 + A_2 + (A_1 \times A_2)^{0.5}) = 1,389 \text{ ft}^3$$
$$V_2 = h_2/3 \times (A_3 + A_4 + (A_3 \times A_4)^{0.5}) = 7,152 \text{ ft}^3$$
$$V_T = V_1 + V_2 = 8,541 \text{ ft}^3 > 8,069 \text{ ft}^3 \text{ OKAY}$$

Where V₁ = Retention Pond 1 Volume, ft³
V₂ = Retention Pond 2 Volume, ft³
V_T = Total Retention Pond Volume, ft³
A₁ = Pond 1 Bottom Area, 239 ft²
A₂ = Pond 1 Top Area, 1,289 ft²
A₃ = Pond 2 Bottom Area, 3,086 ft²
A₄ = Pond 2 Top Area, 5,178 ft²
h₁ = Pond Depth, 2.0 ft
h₂ = Pond Depth, 1.75 ft
Pond Side Slopes = 3:1
Pond Freeboard = 0 ft

THIS IS NOT A BOUNDARY SURVEY. APPARENT PROPERTY CORNERS ARE SHOWN FOR ORIENTATION ONLY.

HUSEMAN PLACE S.W.

TRAFFIC CIRCULATION LAYOUT
GRADING AND DRAINAGE PLAN

COUNTY OF BERNALILLO
PARTS OF SEC. 34 & 35, T10N, R2E PER
ASSESSMENT MAP M-10

BM: ACS 1-3/4" DISK, STAMPED
"ACS BM, 9-M11"
WNN CURB RETURN OF COORS BLVD. SW & HUSEMAN
PLACE, SW
BM ELV. = 4954.83 (NGVD29)

TBM: REBAR W/CAP 'PLS 8911'
SW CORNER LOT 8, COORS-ARENAL INDUSTRIAL PARK
TBM ELV. = 4983.35' (NGVD29)

Legend

- EXISTING SECURITY FENCE
- NEW SECURITY FENCE
- 5200 --- EXISTING ELEV. CONTOUR
- 4980 --- PROPOSED ELEV. CONTOUR
- TCO 85.17
FL 84.67 PROPOSED TOP OF CONCRETE
AND FLOWLINE ELEVATIONS
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KEYED NOTES:

- ① PROPOSED BUILDING.
- ② 5" SIDEWALK W/ TURNED DOWN CURB (1'-2").
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- ④ TRASH BIN.
- ⑤ 6" O.D. STEEL PIPE, CONCRETE FILLED
BOLLARDS, ENCASED IN 12" CONCRETE ALL
AROUND AND EMBEDDED 2'-0", TYPICAL ALL
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AND ASPHALT ELEVATIONS WHERE REQUIRED,
ASSURE SMOOTH TRANSITION.
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OFF-STREET PARKING

PROPOSED BUILDINGS:		ONE 2,500 SF BUILDING
PARKING REQUIREMENT:		
1 P.S. PER 1000 SF OF NET LEASE AREA	2 PARKING SPACES	
NUMBER OF SPACES PROVIDED:	2 PARKING SPACES	
NUMBER OF HC SPACES REQUIRED:	1, VAN ACCESSIBLE, P.S.	
1 SPACE/1-25 REQUIRED P.S.		
NUMBER OF HC SPACES PROVIDED:	1, VAN ACCESSIBLE, P.S.	
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STANDARD SPACE DIMENSIONS:		
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PROPERTY BEING NEAR A FORMER LANDFILL,
CERTAIN PRECAUTIONARY MEASURES MAY NEED TO
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ENGINEER'S CERTIFICATION:

THE ENGINEER HAS PERSONALLY VISITED AND INSPECTED THE SITE.
NO GRADING, FILLING, OR EXCAVATIONS HAVE OCCURRED AFTER
THE TOPOGRAPHIC SURVEY WAS COMPLETED ON AUGUST 29, 2005.

JAMES L. HEWITT, JR., P.E. # 6871
DATE 09/26/05

LEGAL DESCRIPTION

Lot 8, Coors_Arenal Industrial Park Subdivision (City of Albuquerque,
New Mexico).

FLOOD HAZARD ZONE

Lot 8 is located in Flood Hazard Zone X (i.e., areas of 100-year
flood with average depths of less than 1 foot) designated on the
Federal Emergency Management Agency's (FEMA's) Flood Insurance
Rate Map Panel No. 35001C0337E (November 19, 2003).

DRAINAGE ANALYSIS

REFERENCE: City of Albuquerque, Development Process Manual -Vol. 2,
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Principal Design Storm: 100-year 6-hour event

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Lot 8 Area = 46,233 ft² x 1 acre/43,560 ft² = 1.06 acres
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Total Q_P = 2.87 ft³/sec-acre x 1.06 acres
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76.11% Land Treatment 'C', 23.89% Land Treatment 'D' (Table A-4)

AREAS OF DISTURBANCE WILL BE REVEGETATED WITH NATIVE GRASSES

Weighted E = ((E₃ x 0.81 acres) + (E₄ x 0.25 acres))/1.06 acres
= 1.22 in

V₃₆₀ = (1.22 in x 1.06 acres) x 1 ft/12 in
= 0.108 acre-ft x 43,560 ft²/acre
= 4,716 ft³

Total Q_P = (Q_{P3} x 0.81 acres) + (Q_{P4} x 0.25 acres)
= 3.43 ft³/sec

Off-Site 'Existing' Condition:

Offsite Drainage Basin Area = 24,238 ft² x 1 acre/43,560 ft²
= 0.56 acres

100% Land Treatment 'C' (Table A-4)

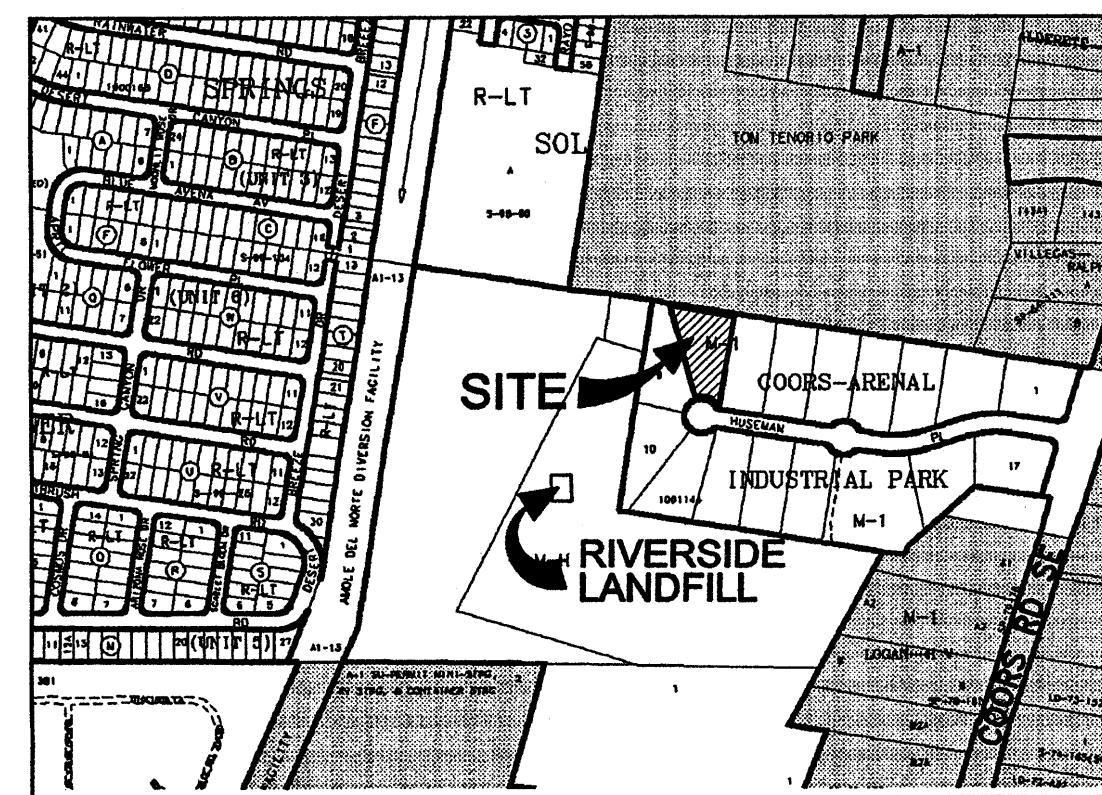
V₃₆₀ = 0.99 in x 0.56 acres x 1 ft/12 in
= 0.046 acre-ft x 43,560 ft²/acre
= 2,000 ft³

Total Q_P = 2.87 ft³/sec-acre x 0.56 acres
= 1.60 ft³/sec

Retention Pond Volume (Required):

V_{10days} = V₃₆₀ + A_D (P_{10days} - P₃₆₀)/12 in/ft
= (4,716 ft³ + 2,000 ft³) +
((0.25 acre-ft (3.67 - 2.2)/12) x 43,560 ft²/acre)
= 8,069 ft³

20' PUBLIC WATERLINE EASEMENT
FILED 10/30/01 DOC#2001128762.
IN BK.-A-26, PG-6989.



GENERAL NOTES:

1. ADD 4900 FEET TO FINISHED FLOOR AND SPOT ELEVATIONS.
2. FOR TOP OF CONCRETE SLABS AND TOP OF FINISH GRADE SEE:
FLOOR PLAN AND FOUNDATION PLAN DETAILS AND EXTERIOR WALL
SECTIONS IN BUILDING PERMIT PLAN SET.
3. CONTRACTOR SHALL OBTAIN TOPSOIL DISTURBANCE AND
EXCAVATION/CONSTRUCTION PERMITS PRIOR TO BEGINNING WORK.
AN APPROVED COPY OF THIS PLAN MUST BE SUBMITTED WITH
PERMIT APPLICATIONS.
4. ALL WORK SHOWN ON THIS PLAN, EXCEPT AS OTHERWISE STATED
OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE
WITH CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR
PUBLIC WORKS CONSTRUCTION, 1986 EDITION (AS AMENDED) AND
IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL LAWS,
RULES, AND REGULATIONS.
5. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR
SHALL REQUEST LINE LOCATING SERVICE (260-1990) FOR EXISTING
UTILITIES.
6. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL EXCAVATE AND
VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL
CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR
SHALL NOTIFY THE ENGINEER SO THAT IT CAN BE RESOLVED WITH
MINIMUM DELAY.
7. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET
USE.
8. THE OWNER OF THE PROPERTY SERVED IS RESPONSIBLE FOR
MAINTENANCE OF THESE FACILITIES.
9. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING RUNOFF ONSITE
AND REMOVAL OF SEDIMENT TRANSPORTED ONTO ADJACENT
RIGHT-OF-WAY AND/OR PROPERTIES DURING CONSTRUCTION
ACTIVITIES.

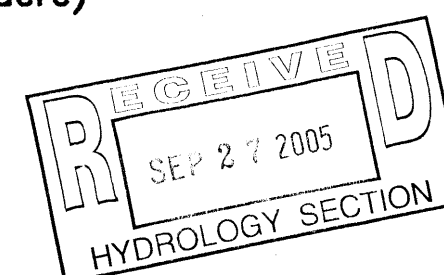
RETENTION POND VOLUMES

$$V_1 = h_1/3 \times (A_1 + A_2 + (A_1 \times A_2)^{0.5}) = 1,389 \text{ ft}^3$$
$$V_2 = h_2/3 \times (A_3 + A_4 + (A_3 \times A_4)^{0.5}) = 7,152 \text{ ft}^3$$
$$V_T = V_1 + V_2 = 8,541 \text{ ft}^3 > 8,069 \text{ ft}^3 \text{ OKAY}$$

Where V₁ = Retention Pond 1 Volume, ft³
V₂ = Retention Pond 2 Volume, ft³
V_T = Total Retention Pond Volume, ft³
A₁ = Pond 1 Bottom Area, 239 ft²
A₂ = Pond 1 Top Area, 1,289 ft²
A₃ = Pond 2 Bottom Area, 3,086 ft²
A₄ = Pond 2 Top Area, 5,178 ft²
h₁ = Pond Depth, 2.0 ft
h₂ = Pond Depth, 1.75 ft
Pond Side Slopes = 3:1
Pond Freeboard = 0 ft

THIS IS NOT A BOUNDARY SURVEY. APPARENT PROPERTY
CORNERS ARE SHOWN FOR ORIENTATION ONLY.

HUSEMAN PLACE S.W.
TRAFFIC CIRCULATION LAYOUT
GRADING AND DRAINAGE PLAN



HEWITT ENGINEERING & ENVIRONMENTAL CONSULTANTS 5615 CRENSHAW ST., NW ALBUQUERQUE, NM 87120 TEL: (505) 898-3195			
PROFESSIONAL AUTO WHOLESALE 7011 HUSEMAN PLACE, SW LOT 8, COORS-ARENAL INDUSTRIAL PARK CITY OF ALBUQUERQUE, NEW MEXICO			
SIZE D	FSCM NO.	DWG NO. ZAMORA05-002-GRADING_PLAN.dwg	REV
SCALE 1"=20'	DRAWN BY: RG/JLH	SHEET 1 OF 1	