

PROJECT INFORMATION

PROJECT: MERIDIAN BUSINESS PARK
NEW OFFICE WAREHOUSE BUILDING

LOCATION: 1301 MERIDIAN PLACE NW
ALBUQUERQUE, NEW MEXICO
LOCATED BETWEEN AIRPORT ROAD AND
UNDER BOULEVARD

OWNER: G & A LTD. CO.
1400 MERIDIAN PLACE, SUITE D
ALBUQUERQUE, NEW MEXICO 87121

ARCHITECT: CLAUDIO VIGIL ARCHITECTS
1801 RIO GRANDE BOULEVARD, NW,
ALBUQUERQUE, NEW MEXICO 87104

LEGAL DESCRIPTION: LOT 9, MERIDIAN BUSINESS PARK
ZONING ATLAS MAP: K-10-Z
ZONING CLASSIFICATION: I-1 INDUSTRIAL PARK ZONE
BUILDING FUNCTION: OFFICE WAREHOUSE
CONSTRUCTION TYPE: TYPE II-N CONSTRUCTION WITH
100% AUTOMATIC FIRE SPRINKLER
SYSTEM (EFOR)
B (OFFICE) / S-1 (WAREHOUSE)

OCCUPANCY TYPE:

ALLOWABLE AREA:
GROUP B AND S-1 OCCUPANCIES, TYPE II-N CONSTRUCTION
ALLOWABLE BASE AREA = 12,000 SF
ALLOWABLE INCREASE FOR SPRINKLER SYSTEM X3
SEPARATION ON 4 SIDE 5% X (35'-20') = 15%
63,000 SF.

- NOTES:**
- ALL ASPHALT AND CONCRETE CONSTRUCTION MUST BE 100% COMPLETE BEFORE INITIAL CALL FOR TEMPORARY CERTIFICATE OF OCCUPANCY.
 - AN AS-BUILT COPY OF THE APPROVED TCL (TRAFFIC CIRCULATION LAYOUT) MUST BE SUBMITTED BY THE DESIGNER OF RECORD, AS REQUIRED BY THE TRANSPORTATION DEVELOPMENT (INCLUDING RANDOM FIELD CHECKS) WILL BE MADE BEFORE A FINAL CERTIFICATE OF OCCUPANCY IS ISSUED. PLEASE CALL THIS OFFICE TO OBTAIN TEMPORARY CO.
 - OVERHEAD DOCK DOORS MUST BE INSTALLED ON THE INTERIOR SIDE. THE RETRACTING EQUIPMENT MUST NOT APPEAR ON THE EXTERIOR.
 - NO FUGITIVE LIGHT WILL BE ALLOWED TO ESCAPE THE SITE.
 - SITE LIGHTING SHALL NOT GLARE ON TO ANY PUBLIC RIGHT-OF-WAY AND SHALL NOT HAVE AN OFF-SITE LUMINANCE OF GREATER THAN 1000 FOOT CANDLETS. ALL LIGHT FIXTURES SHALL BE FULL CUTOFF TYPE TO PREVENT FUGITIVE LIGHT. NO LIGHT SOURCE SHALL BE VISIBLE FROM THE SITE PERIMETER. ALL LAMPS MUST BE FULLY SHIELDED TO PREVENT FUGITIVE LIGHT BEYOND THE PROPERTY LINE.
- FIRE ACCESS ROADS SHALL BE MIN 20'-0" WIDTH WITH PROVISIONS OF COMPARISON TO CHURN A TRUCK DURING ALL WEATHER CONDITIONS

TOTAL BUILDING AREA: 50,400 SQUARE FEET

BUILDING HEIGHT: 35'-0" AFF

OCCUPANCY LOAD: OFFICE = 2400 SF / 100 = 24
WAREHOUSE = 48000 SF / 500 = 96
TOTAL = 120

TOTAL LOT AREA: 124,539 SQUARE FEET, 2.859 ACRES

NET LOT AREA: 14,199 SF

TOTAL PARKING/PAVED AREA: 26,286 SF

TOTAL LANDSCAPE AREA REQUIRED: 11,21 SF

TOTAL LANDSCAPE AREA PROVIDED: 45,818 SF

LANDSCAPE TO PARKING AREA RATIO: 0.6 TO 1

PARKING ANALYSIS: OFFICE AREA = 2400 SF = 12 SPACES
WAREHOUSE AREA = 48000 SF = 24 SPACES
TOTAL = 36 SPACES

TOTAL PARKING SPACES REQUIRED = 36 PARKING SPACES
(INCLUDES 2 VAN ACCESSIBLE PARKING SPACES)

PARKING SPACE SIZES:

REGULAR CAR PARKING SPACES = 9'-0" x 18'-0" WITH A 2'-0" OVERHANG

VAN ACCESSIBLE = 9'-0" x 18'-0" WITH A 2'-0" OVERHANG AND A 9'-0" WIDE ACCESS STRIP

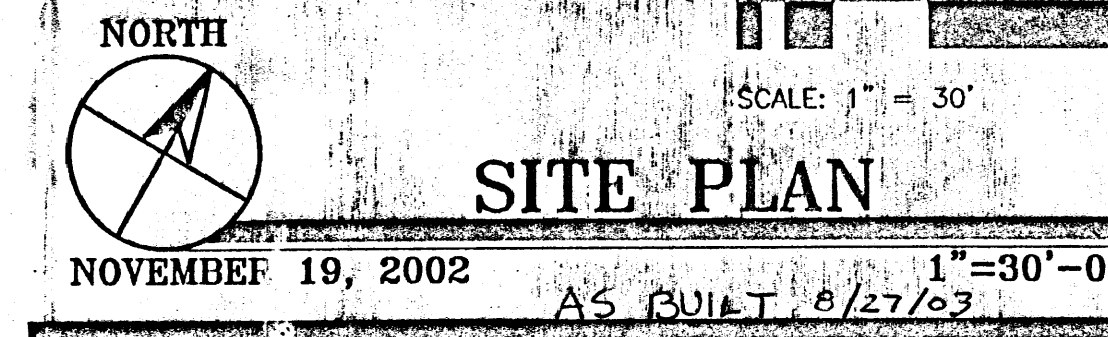
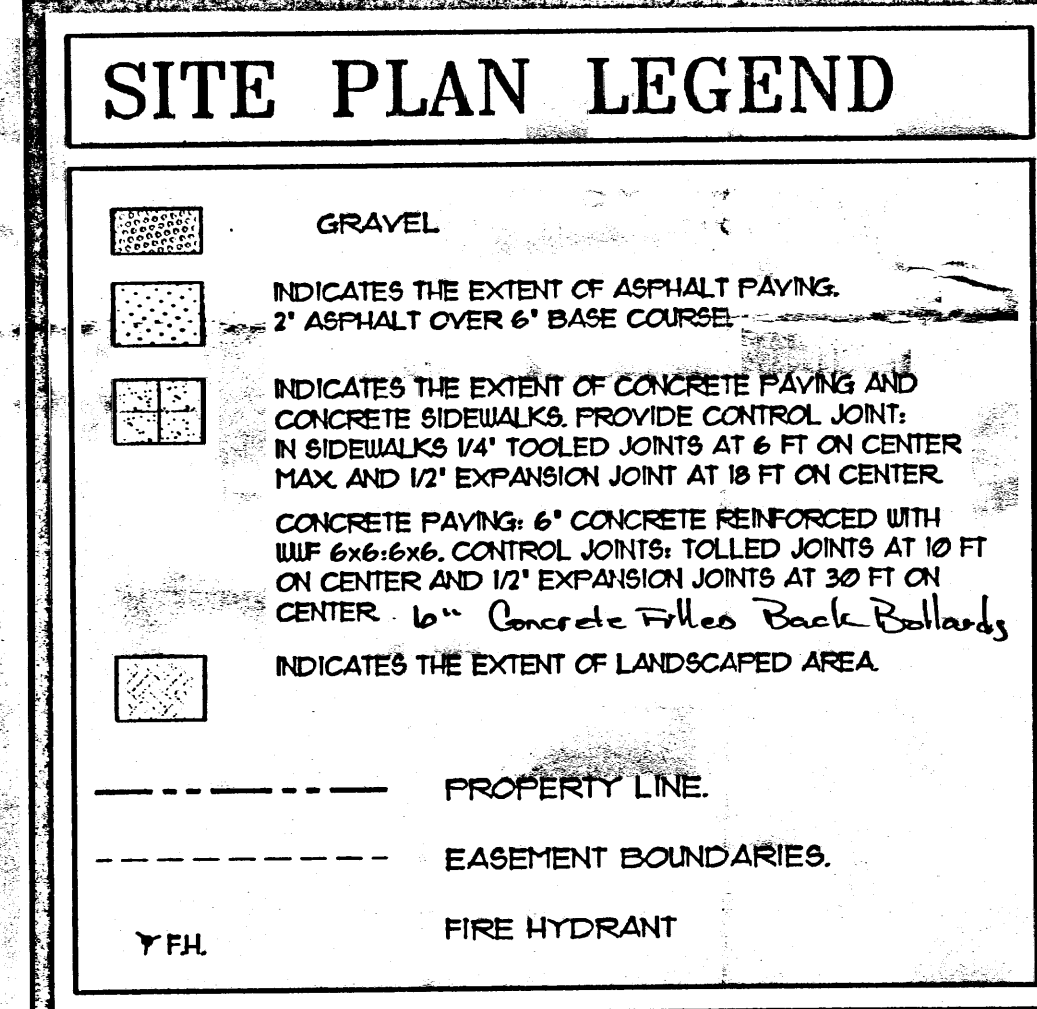
HANDICAP PARKING SPACE = 9'-0" x 18'-0" WITH A 2'-0" OVERHANG AND A 9'-0" WIDE ACCESS STRIP

BICYCLE SPACES:

REQUIRED PARKING = 36/20 = 1.8 BICYCLES

TOTAL BICYCLE SPACES REQUIRED = 2 BICYCLE SPACES

TOTAL BICYCLE SPACES PROVIDED = 4 BICYCLE SPACES
(1 BIKE RACK POSTS AT 4 BICYCLES PER POST)



SIGNATURE BLOCK

PROJECT# 1002354 E.P.C. CASE NO. 02-008-0172 D.R.B. CASE NO. 02-008-0172

THIS PLAN IS CONSISTENT WITH THE SPECIFIC SITE DEVELOPMENT PLAN APPROVAL BY THE ENVIRONMENTAL PLANNING COMMISSION (EPC) ON AND THAT THE FINDINGS AND CONDITIONS IN THE OFFICIAL NOTICE, NOTIFICATION OF DECISION HAVE BEEN COMPLIED WITH:

SITE DEVELOPMENT PLAN

Ribal D. Dora 12-06-02 DATE
TRAFFIC ENGINEER, TRANSPORTATION DIVISION

David Flores 11/28/02 DATE
PARKS & RECREATION DEPARTMENT

James M. Munt 12/06/02 DATE
PUBLIC WORKS, WATER UTILITIES DIVISION

Brad L. Bilton 11/28/02 DATE
CITY ENGINEER, ENGINEERING DIVISION / AMFCA

Sharon M. Minton 7 Nov 02 DATE
SOLID WASTE DEPARTMENT / REFUSE

APPROVAL AND CONDITIONAL ACCEPTANCE: AS SPECIFIED BY THE DEVELOPMENT PROCESS MANUAL.

Sharon M. Minton 11/27/2002 DATE
CITY PLANNER, ALBUQUERQUE

PLN2(10706) 4/98

CLAUDIO VIGIL ARCHITECTS

MYGRANT GLASS

MERIDIAN LOT 9

7301 MERIDIAN PLACE NW

ALBUQUERQUE, NEW MEXICO

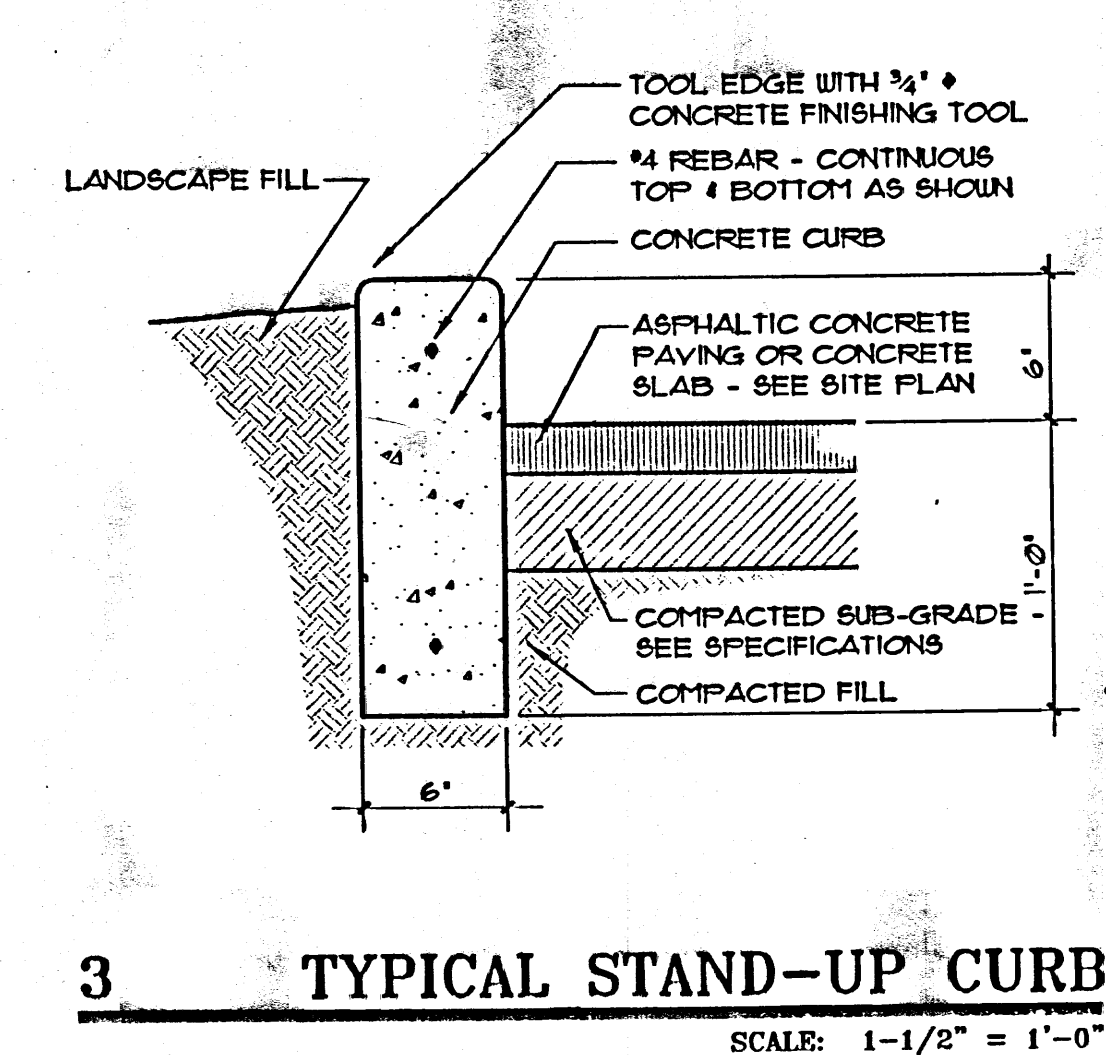
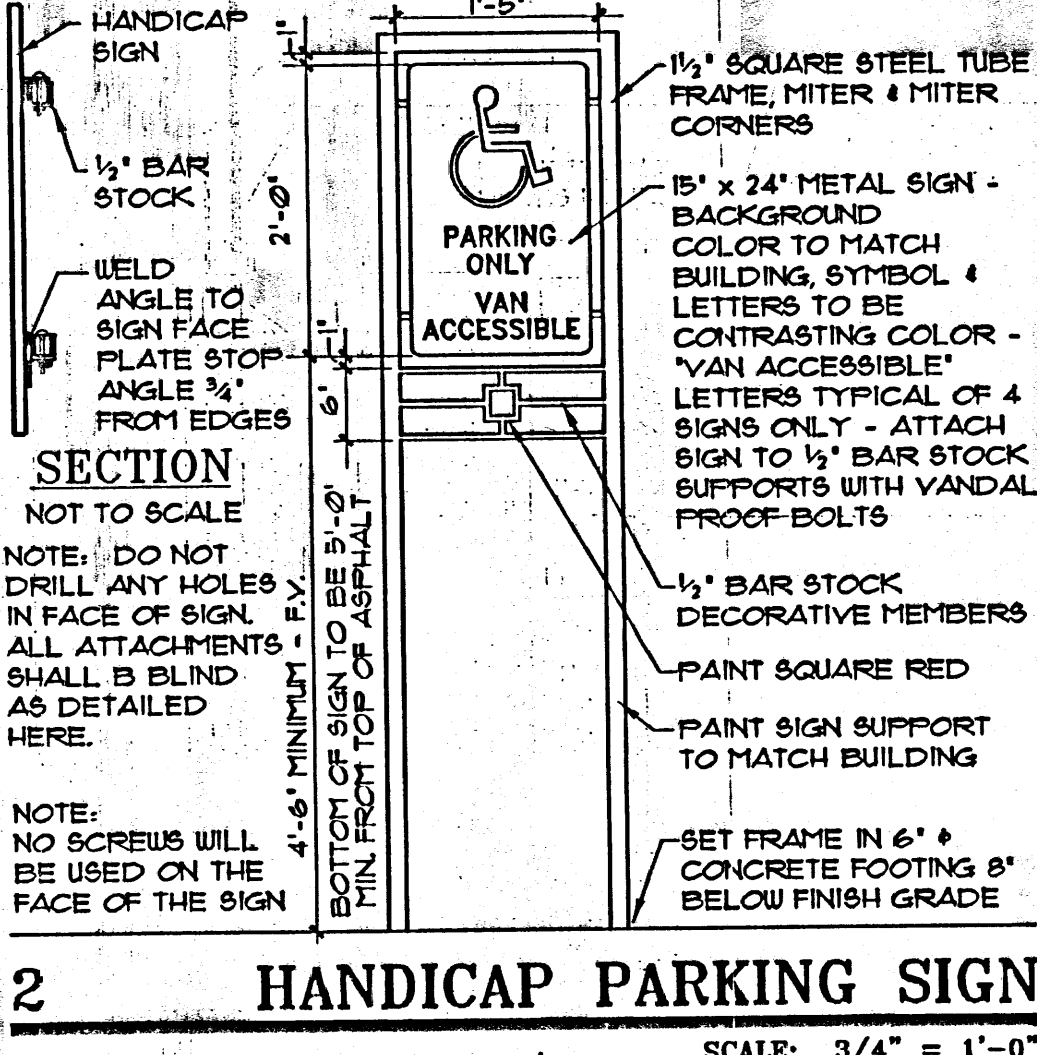
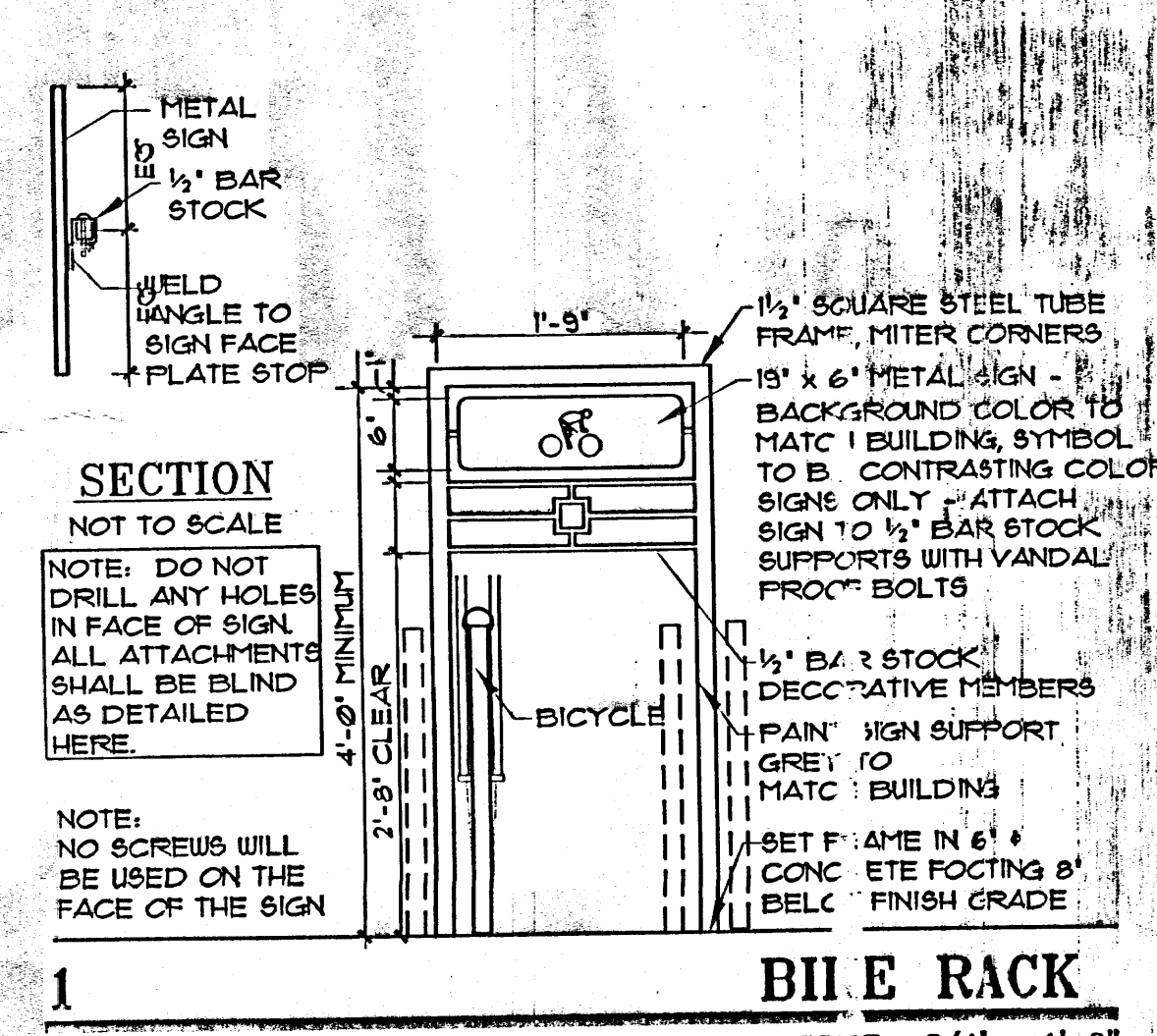
SHEET SP-1

PROJECT NUMBER 00000

OWNERSHIP OF INSTRUMENTS OF SERVICE

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1801 Rio Grande NW, #2, Albuquerque, NM 87104
Phone: 505/842-1113 Fax: 505/842-1330



AFD PLANS CHECKING OFFICE
924-3611
APPROVED: APPROVED
HYDRANT(S) ONLY
Signature & Date

GRADING AND DRAINAGE PLAN - LOT 9

DRAINAGE PLAN

THE FOLLOWING ITEMS CONCERNING THE LOT-9, MERIDIAN BUSINESS PARK GRADING AND DRAINAGE PLAN ARE CONTAINED HEREON:

1. VICINITY MAP
2. GRADING PLAN
3. CALCULATIONS

THE PROPOSED IMPROVEMENTS, AS SHOWN BY THE VICINITY MAP, ARE LOCATED ON THE NORTHEAST CORNER OF THE INTERSECTION OF MERIDIAN PLACE AND GALLATIN DRIVE. THE SITE IS UNDEVELOPED. THE LANDS SLOPE FROM THE NORTHWEST CORNER TO THE SOUTHEAST AT AN APPROXIMATE SLOPE OF 1.5%. THE SITE WAS IN A FLOOD HAZARD ZONE, BUT THE CONSTRUCTION OF THE UNDER DIVERSION CHANNEL REMOVED THE SITE FROM THE FLOOD HAZARD ZONE.

THE MASTER DRAINAGE PLAN FOR THIS SUBDIVISION WAS PREPARED BY EASTERN AND ASSOCIATES. THE MASTER PLAN ESTABLISHED A DISCHARGE RATE OF 0.1 CFS/ACRE AND REQUIRES TEMPORARY DIVERSION DITCHES AND PONDS TO CONTROL THE RUNOFF BE CONSTRUCTED ON EACH LOT.

THE CALCULATIONS ANALYZE THE EXISTING AND PROPOSED CONDITIONS FOR THE 6-HOUR, 100 YEAR RAINFALL EVENT. THE ANALYSIS IS IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL VOLUME II, AS SHOWN BY THESE CALCULATIONS. THE RATE AND VOLUME OF RUNOFF WILL INCREASE BUT THE POND(S) WITH CONTROLLED OUTLETS WILL MITIGATE THE INCREASE. THIS PLAN IS IN CONFORMANCE WITH THE MASTER DRAINAGE PLAN.

CALCULATIONS
PRECIPITATION ZONE = 1
TOTAL SITE AREA = 2.859 ACRES

Basin A
AREA = 1.642 ACRES (57%)
EXISTING CONDITIONS
LAND TREATMENT A=100%
E = 0.44(1.00) = 0.44 INCHES
V = 0.44 (1.642) / 12 = 0.060 ACRE FEET
Q = 1.29 (1.00) (1.642) = 2.1 CFS

DEVELOPED CONDITIONS
LAND TREATMENT B=25% D=75%
E = 0.67 (0.25) + 1.97 (0.75) = 1.65 INCHES
V = 1.64 (1.642) / 12 = 0.226 ACRE FEET
Q = [2.03 (0.25) + 4.37 (0.75)] (1.642) = 6.2 CFS

INCREASE IN VOLUME OF RUNOFF = 0.166 ACRE FT
INCREASE IN RATE OF RUNOFF = 4.1 CFS

POND VOLUME BASIN A
T_c = 0.2 HR
T_e = 2.107 E At/Qp - 0.25 Ad/At = 0.188 HR
T_p = (0.7 T_c) + ((1.6 - Ad/At) / 12) = 0.211 HR

DISCHARGE RATE = 0.1 (1.64) = 0.16 CFS
V_{required} = 9,804 CF

POND VOLUME BASIN B
VOLUME @ ELEV 5104.0
V = [0.5*(11559+2(5230)+2933)*0.5
+ 0.5*(2933+2(1516)+941)*1.0
+ 0.5*(941)*0.5] = 9,926 CF

DISCHARGE PIPE SIZES AT POND A
USE 1 3/4" DIA ORIFICE AREA = 2.41 IN SQ = 0.0167 SF
Q = 0.60 (0.0167) √ 2 (32.2) (3.5) = 0.15 CFS

THIS SITE IS HIGHER THAN THE LANDS TO THE EAST AND THE ROAD TO THE SOUTH. THE STREET TO WEST PREVENTS OFF SITE FLOWS FROM THE WEST. AN EXISTING EARTHEN DITCH/DIKE TO THE NORTH BLOCKS OFF SITE FLOWS FROM THE NORTH. THEREFORE, OFF SITE FLOWS ARE NOT CONSIDERED SIGNIFICANT.

THE GRADING PLAN SHOWS:

1. THE EXISTING AND PROPOSED GRADES, INDICATED BY SPOT ELEVATIONS AND CONTOURS AT 1'-0" INTERVALS.
2. CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS.
3. THE LIMIT AND CHARACTER OF EXISTING IMPROVEMENTS, AND
4. THE LIMIT AND CHARACTER OF THE PROPOSED IMPROVEMENTS.

THE PROPOSED IMPROVEMENTS CONSIST OF A WAREHOUSE/OFFICE WITH ASSOCIATED PARKING AND LANDSCAPING. THE SITE HAS BEEN DIVIDED INTO TWO SUBBASINS. THE RUNOFF FROM SUBBASIN A FLOWS TO DETENTION POND A LOCATED ALONG THE SOUTH PROPERTY LINE. THE RUNOFF FROM SUBBASIN B FLOWS TO DETENTION POND B LOCATED AT THE NORTHEAST CORNER. BOTH POND DISCHARGE INTO THE EXISTING PRIVATE STORM DRAIN AT THE SOUTHEAST CORNER OF THE SITE. THE COMBINED RATE OF DISCHARGE FROM THE PONDS IS 0.28 CFS (0.1 CFS/ACRE).

Basin B
AREA = 1.217 ACRES (43%)
EXISTING CONDITIONS
LAND TREATMENT A=100%
E = 0.44(1.00) = 0.44 INCHES
V = 0.44 (1.217) / 12 = 0.045 ACRE FEET
Q = 1.29 (1.00) (1.217) = 1.6 CFS

DEVELOPED CONDITIONS
LAND TREATMENT B=52% D=48%
E = 0.67 (0.52) + 1.97 (0.48) = 1.29 INCHES
V = 1.29 (1.217) / 12 = 0.131 ACRE FEET
Q = [2.03 (0.52) + 4.37 (0.48)] (1.217) = 3.8 CFS

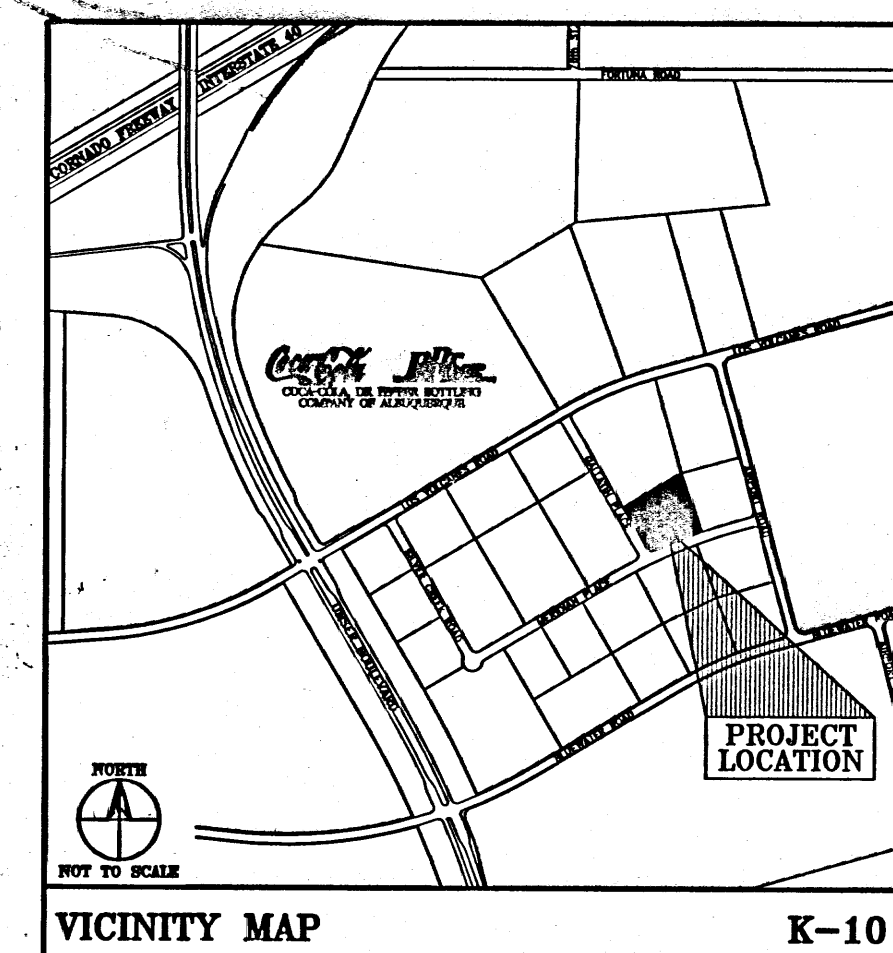
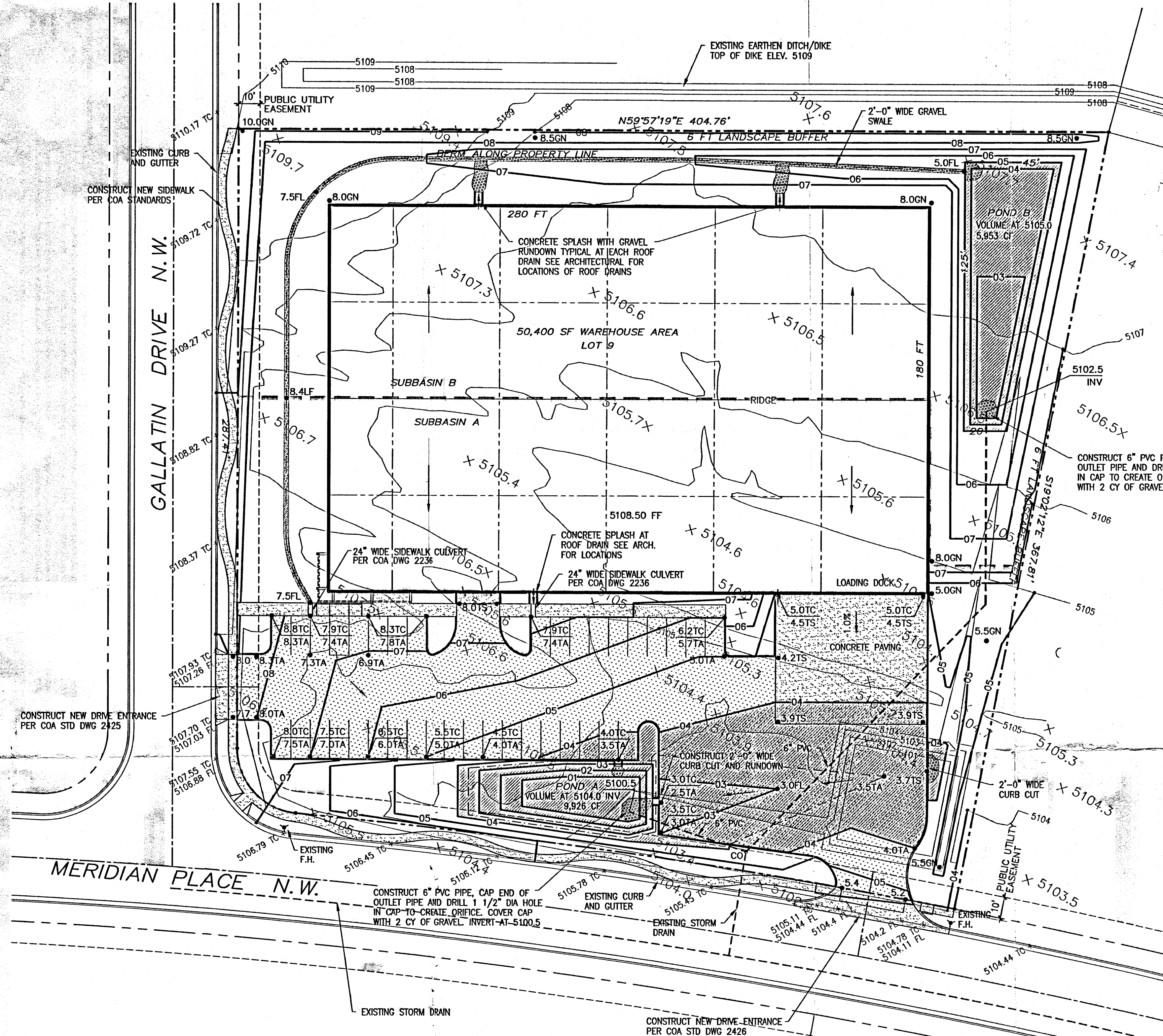
INCREASE IN VOLUME OF RUNOFF = 0.121 ACRE FT
INCREASE IN RATE OF RUNOFF = 2.2 CFS

POND VOLUME BASIN B
T_c = 0.2 HR
T_e = 2.107 E At/Qp - 0.25 Ad/At = 0.145 HR
T_p = (0.7 T_c) + ((1.6 - Ad/At) / 12) = 0.234 HR

DISCHARGE RATE = 0.1 (1.22) = 0.12 CFS
V_{required} = 5,622 CF

POND VOLUME BASIN B
VOLUME @ ELEV 5105.0
V = [0.5*(4062+2(3146)+1035)*1.0+0.5*(1035)*0.5] = 5,953 CF

DISCHARGE PIPE SIZES AT POND B
USE 1 3/4" DIA ORIFICE AREA = 2.41 IN SQ = 0.0167 SF
Q = 0.60 (0.0167) √ 2 (32.2) (2.5) = 0.13 CFS



ADDRESS: 7301 MERIDIAN PLACE
LEGAL DESCRIPTION: LOT 9, MERIDIAN BUSINESS PARK
BENCH MARK: ACS MONUMENT 10-K10 LOCATED AT THE SOUTHEAST CORNER OF UNSER BOULEVARD AND LOS VOLCANES ROAD
ELEVATION = 5142.79 FT.

CONSTRUCTION NOTES

1. TWO WORKING DAY PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CALL FOR LOCATION OF EXISTING UTILITIES.
2. ALL WORK WITHIN THE CITY RIGHT OF WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE CITY OF ALBUQUERQUE STANDARD AND PROCEDURE.
3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS, LAWS, AND RULES CONCERNING SAFETY AND HEALTH.
4. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY THE EXISTING SITE CONDITIONS AND INFORM THE ARCHITECT / ENGINEER OF ANY DISCREPANCY BETWEEN THE INFORMATION SHOWN THE PLANS AND THOSE OF THE EXISTING SITE.
5. THE OWNER SHALL VERIFY LOCATIONS OF PONDS WITH GEOTECHNICAL ENGINEER PRIOR TO PROCEEDING WITH ANY CONSTRUCTION WORK ON THIS PROJECT, AND INFORM THE ARCHITECT / ENGINEER OF ANY ADDITIONAL REQUIREMENTS.
6. CONTRACTOR SHALL PROVIDE THE ARCHITECT / ENGINEER AS BUILT SURVEY FOR ENGINEER'S CERTIFICATION.



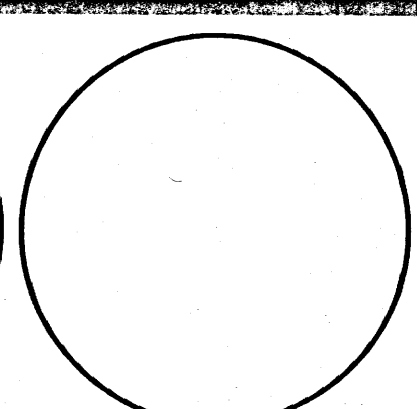
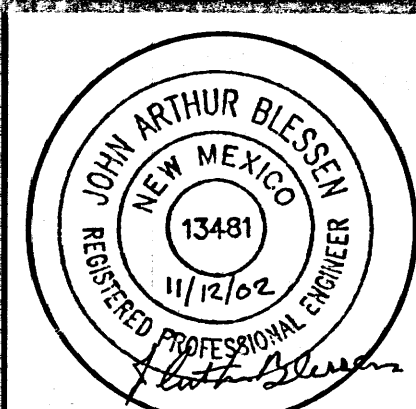
GRADING PLAN

NOVEMBER 12, 2002

1"=30'-0"

CLAUDIO VIGIL ARCHITECTS

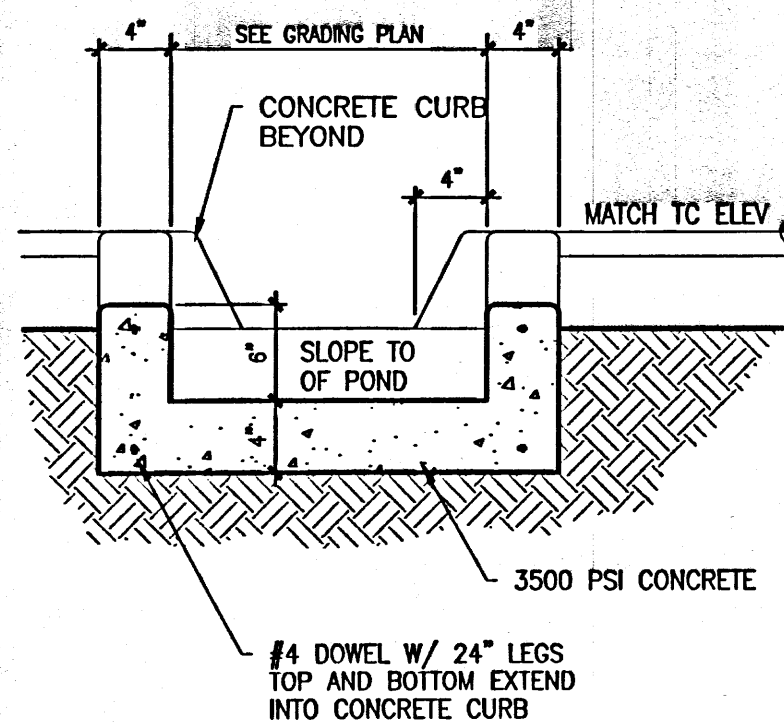
MYGRANT GLASS
MERIDIAN LOT 9
7301 MERIDIAN PLACE
ALBUQUERQUE, NEW MEXICO



SHEET
C-1
PROJECT NUMBER
02075

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Phone: 505/842-1113 Fax: 505/842-1330



1 CONCRETE RUNDOWN
3/4"=1'-0"

GRADING AND DRAINAGE PLAN - LOT 9

DRAINAGE PLAN

THE FOLLOWING ITEMS CONCERNING THE LOT-9, MERIDIAN BUSINESS PARK GRADING AND DRAINAGE PLAN ARE CONTAINED HEREON:

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CALCULATIONS

PRECIPITATION ZONE = 1
TOTAL SITE AREA = 2.859 ACRES

Basin A

AREA = 1.642 ACRES (57%)
EXISTING CONDITIONS
LAND TREATMENT A=100%
E = 0.44(1.00) = 0.44 INCHES
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LAND TREATMENT B=25% D=75%
E = 0.67 (0.25) + 1.97 (0.75) = 1.65 INCHES
V = 1.64 (1.642) / 12 = 0.226 ACRE FEET
Q = [2.03 (0.25) + 4.37 (0.75)] (1.642) = 6.2 CFS
INCREASE IN VOLUME OF RUNOFF = 0.166 ACRE FT
INCREASE IN RATE OF RUNOFF = 4.1 CFS

POND VOLUME BASIN A
T_c = 0.2 HR 0.25 Ad/At = 0.25(0.75) = 0.188 HR
T_b = 2.107 E At/Qp - 0.25 Ad/At = 0.728 HR
T_p = (0.7 Tc) + ((1.6 - Ad/At) / 12) = 0.211 HR
DISCHARGE RATE = 0.1 (1.64) = 0.16 CFS
V_{required} = 9,804 CF

POND VOLUME POND A
VOLUME @ ELEV 5103.5
V = [0.5*(12505+7632)*0.5
+ 0.5*(7632+2(1501)+831)*1.0
+ 0.5*(831)*0.5] = 10,975 CF

DISCHARGE PIPE SIZES AT POND A

USE 1 3/4" DIA ORIFICE AREA = 2.41 IN SQ = 0.0167 SF
Q = 0.60 (0.0167) √ 2 (32.2) (3.0) = 0.14 CFS

Basin B

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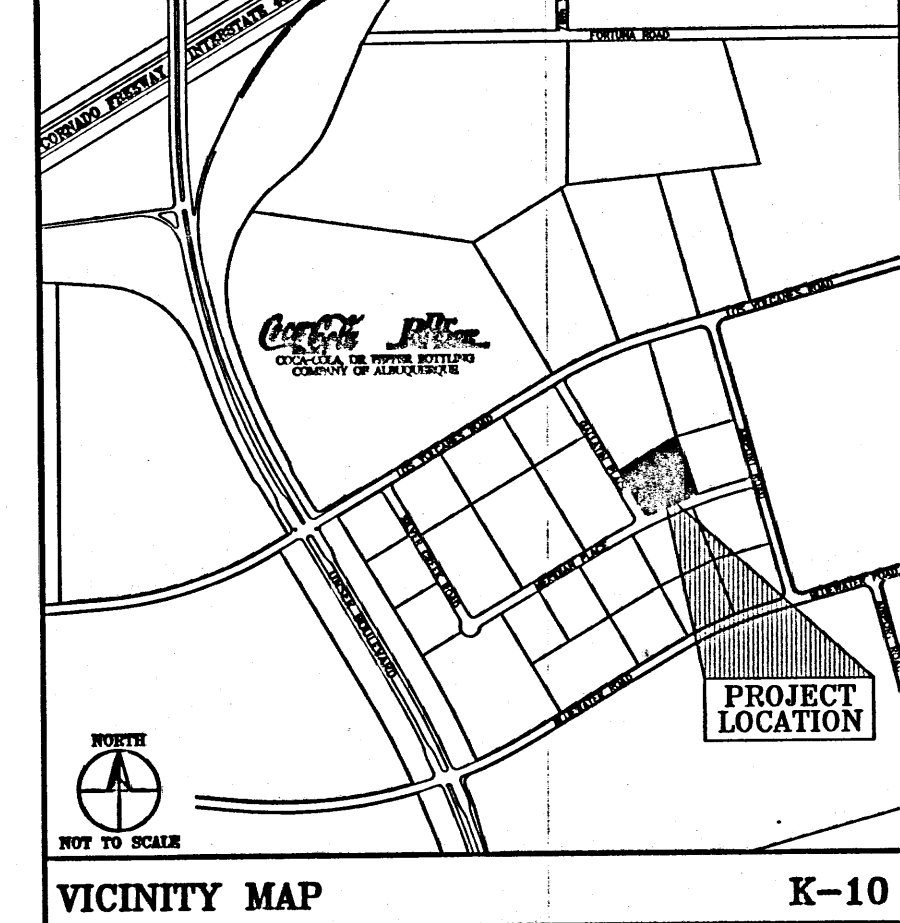
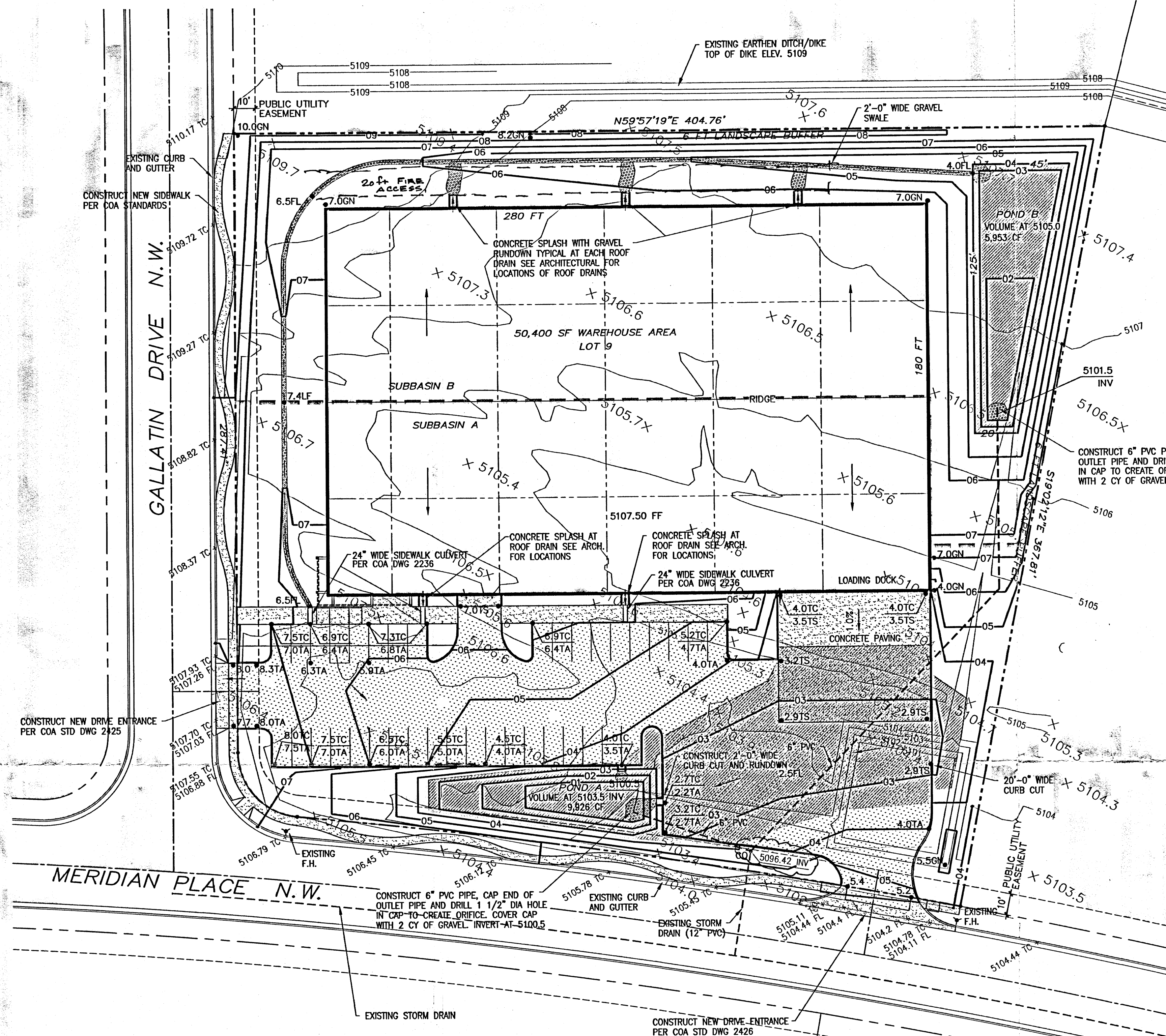
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DISCHARGE RATE = 0.1 (1.22) = 0.12 CFS
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ADDRESS:
7301 MERIDIAN PLACE
LEGAL DESCRIPTION:
LOT 9, MERIDIAN BUSINESS PARK

BENCH MARK:
ACS MONUMENT 10-K10 LOCATED AT THE SOUTHEAST CORNER OF UNSER BOULEVARD AND LOS VOLCANES ROAD
ELEVATION = 5142.79 FT.

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3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS, LAWS, AND RULES CONCERNING SAFETY AND HEALTH.
4. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY THE EXISTING SITE CONDITIONS AND INFORM THE ARCHITECT / ENGINEER OF ANY DISCREPANCY BETWEEN THE INFORMATION SHOWN, THE PLANS AND THOSE OF THE EXISTING SITE.
5. THE OWNER SHALL VERIFY LOCATIONS OF PONDS WITH GEOTECHNICAL ENGINEER PRIOR TO PROCEEDING WITH ANY CONSTRUCTION WORK ON THIS PROJECT, AND INFORM THE ARCHITECT / ENGINEER OF ANY ADDITIONAL REQUIREMENTS.
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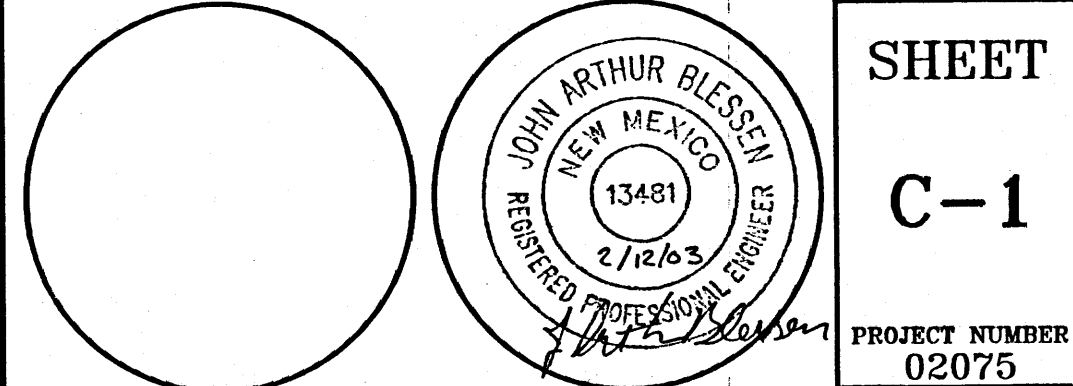
1/2/03 REVISION
REVISION



GRADING PLAN
FEBRUARY 12, 2003 1"=30'-0"

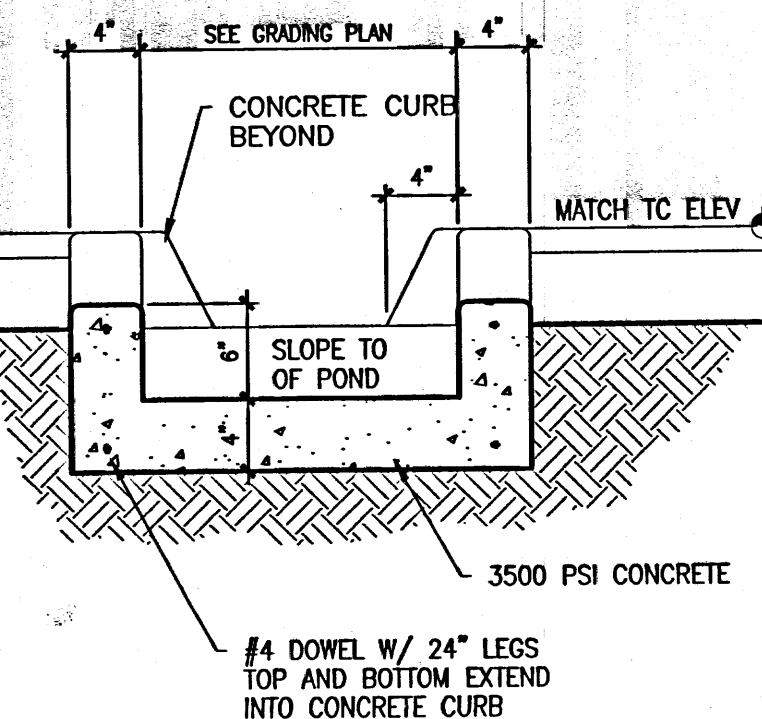
CLAUDIO VIGIL ARCHITECTS

MYGRANT GLASS
MERIDIAN LOT 9
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ALBUQUERQUE, NEW MEXICO

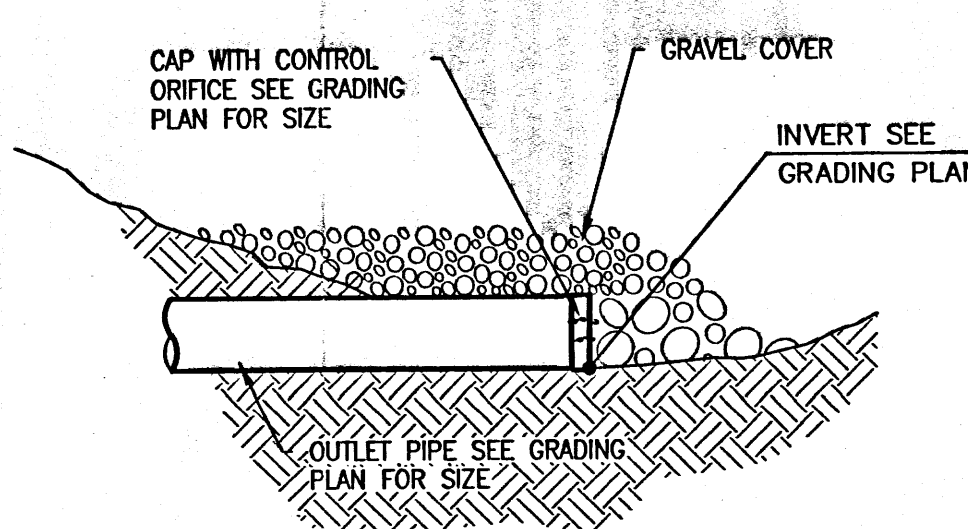


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Phone: 505/842-1113 Fax: 505/842-1330



1 CONCRETE RUNDOWN
3/4"=1'-0"



2 OUTLET PIPE DETAIL
3/4"=1'-0"

GRADING AND DRAINAGE PLAN - LOT 9

DRAINAGE PLAN

THE FOLLOWING ITEMS CONCERNING THE LOT-9, MERIDIAN BUSINESS PARK GRADING AND DRAINAGE PLAN ARE CONTAINED HEREON:

1. VIGNITY MAP
2. GRADING PLAN
3. CALCULATIONS

THE PROPOSED IMPROVEMENTS, AS SHOWN BY THE VIGNITY MAP, ARE LOCATED ON THE NORTHEAST CORNER OF THE INTERSECTION OF MERIDIAN PLACE AND GALLATIN DRIVE. THE SITE IS UNDEVELOPED. THE LANDS SLOPE FROM THE NORTHWEST CORNER TO THE SOUTHEAST AT AN APPROXIMATE SLOPE OF 1.5%. THE SITE WAS IN A FLOOD HAZARD ZONE, BUT THE CONSTRUCTION OF THE UNSER DIVERSION CHANNEL REMOVED THE SITE FROM THE FLOOD HAZARD ZONE.

THE MASTER DRAINAGE PLAN FOR THIS SUBDIVISION WAS PREPARED BY EASTLING AND ASSOCIATES. THE MASTER PLAN ESTABLISHED A DISCHARGE RATE OF 0.1 CFS/ACRE AND REQUIRES TEMPORARY DIVERSION DITCHES AND PONDS TO CONTROL THE RUNOFF BE CONSTRUCTED ON EACH LOT.

THIS SITE IS HIGHER THAN THE LANDS TO THE EAST AND THE ROAD TO THE SOUTH. THE STREET TO WEST PREVENTS OFF SITE FLOWS FROM THE WEST. AN EXISTING EARTHEN DITCH/DIKE TO THE NORTH BLOCKS OFF SITE FLOWS FROM THE NORTH. THEREFORE, OFF SITE FLOWS ARE NOT CONSIDERED SIGNIFICANT.

THE GRADING PLAN SHOWS:

1. THE EXISTING AND PROPOSED GRADES, INDICATED BY SPOT ELEVATIONS AND CONTOURS AT 1'-0" INTERVALS.
2. CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS.
3. THE LIMIT AND CHARACTER OF EXISTING IMPROVEMENTS, AND
4. THE LIMIT AND CHARACTER OF THE PROPOSED IMPROVEMENTS.

THE PROPOSED IMPROVEMENTS CONSIST OF A WAREHOUSE/OFFICE WITH ASSOCIATED PARKING AND LANDSCAPING. THE SITE HAS BEEN DIVIDED INTO TWO SUBBASINS. THE RUNOFF FROM SUBBASIN A FLOWS TO DETENTION POND A LOCATED ALONG THE SOUTH PROPERTY LINE. THE RUNOFF FROM SUBBASIN B FLOWS TO DETENTION POND B LOCATED AT THE NORTHEAST CORNER. BOTH POND DISCHARGE INTO THE EXISTING PRIVATE STORM DRAIN AT THE SOUTHEAST CORNER OF THE SITE. THE COMBINED RATE OF DISCHARGE FROM THE PONDS IS 0.27 CFS (0.1 CFS/ACRE).

THE CALCULATIONS ANALYZE THE EXISTING AND PROPOSED CONDITIONS FOR THE 6-HOUR, 100 YEAR RAINFALL EVENT. THE ANALYSIS IS IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL VOLUME II. AS SHOWN BY THESE CALCULATION, THE RATE AND VOLUME OF RUNOFF WILL INCREASE BUT THE POND(S) WITH CONTROLLED OUTLETS WILL MITIGATE THE INCREASE. THIS PLAN IS IN CONFORMANCE WITH THE MASTER DRAINAGE PLAN.

CALCULATIONS

PRECIPITATION ZONE = 1
TOTAL SITE AREA = 2.859 ACRES

BASIN A

AREA = 1.642 ACRES (57%)
EXISTING CONDITIONS
LAND TREATMENT A=100%
E = 0.44(1.00) = 0.44 INCHES
V = 0.44 (1.642) / 12 = 0.060 ACRE FEET
Q = 1.29 (1.00) (1.642) = 2.1 CFS

DEVELOPED CONDITIONS

LAND TREATMENT B=25% D=75%
E = 0.67 (0.25) + 1.97 (0.75) = 1.85 INCHES
V = 1.84 (1.642) / 12 = 0.226 ACRE FEET
Q = [2.03 (0.25) + 4.37 (0.75)] (1.642) = 6.2 CFS
INCREASE IN VOLUME OF RUNOFF = 0.166 ACRE FT
INCREASE IN RATE OF RUNOFF = 4.1 CFS

POND VOLUME BASIN A

T_b = 0.2 HR 0.25 Ad/At = 0.25(0.75) = 0.188 HR
T_p = 2.107 E At/Op - 0.25 Ad/At = 0.728 HR
T_t = (0.7 Tc) + ((1.6 - Ad/At)/(12)) = 0.211 HR
DISCHARGE RATE = 0.1 (1.64) = 0.16 CFS
V_{required} = 9.804 CF

POND VOLUME POND A

VOLUME @ ELEV 5103.5
V = [0.5*(12505+7632)*0.5
+ 0.5*(7632+2(1501)+831)*1.0
+ 0.5*(831)*0.5] = 10,975 CF

DISCHARGE PIPE SIZES AT POND A

USE 1 3/4" DIA ORIFICE AREA = 2.41 IN SQ = 0.0167 SF
Q = 0.60 (0.0167) $\sqrt{2 (32.2) (3.0)}$ = 0.14 CFS

BASIN B

AREA = 1.217 ACRES (43%)
EXISTING CONDITIONS
LAND TREATMENT A=100%
E = 0.44(1.00) = 0.44 INCHES
V = 0.44 (1.217) / 12 = 0.045 ACRE FEET
Q = 1.29 (1.00) (1.217) = 1.6 CFS

DEVELOPED CONDITIONS

LAND TREATMENT B=52% D=48%
E = 0.67 (0.52) + 1.97 (0.48) = 1.29 INCHES
V = 1.29 (1.217) / 12 = 0.131 ACRE FEET
Q = [2.03 (0.52) + 4.37 (0.48)] (1.217) = 3.8 CFS
INCREASE IN VOLUME OF RUNOFF = 0.121 ACRE FT
INCREASE IN RATE OF RUNOFF = 2.2 CFS

POND VOLUME BASIN B

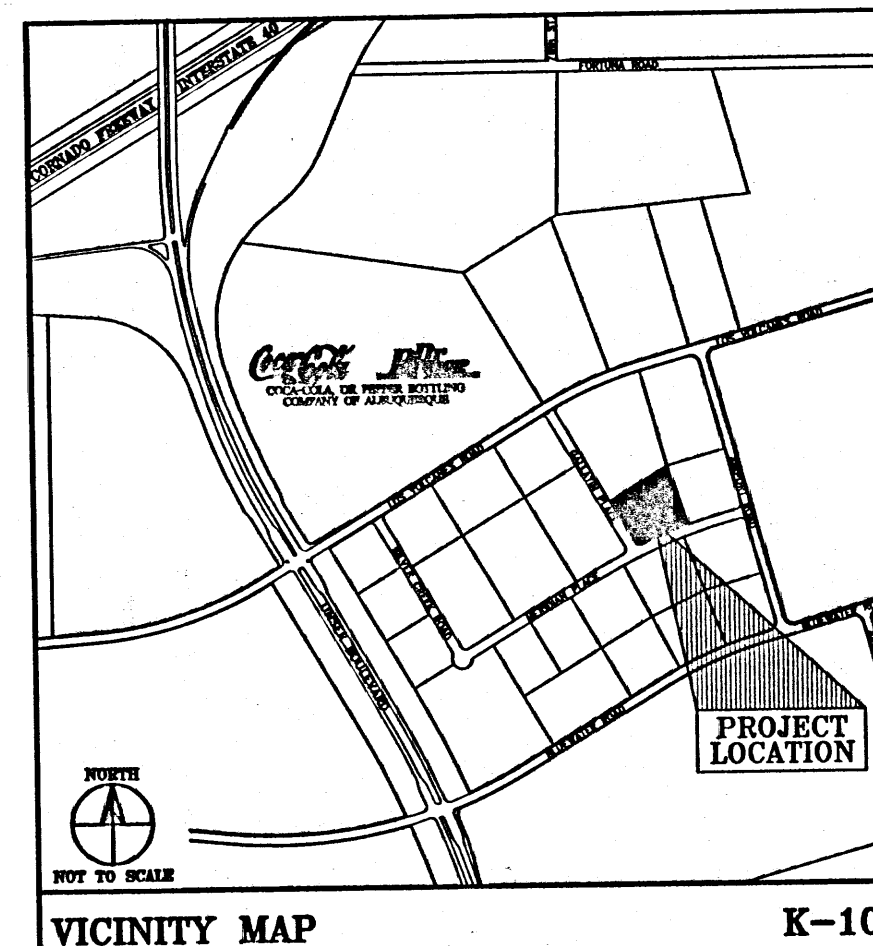
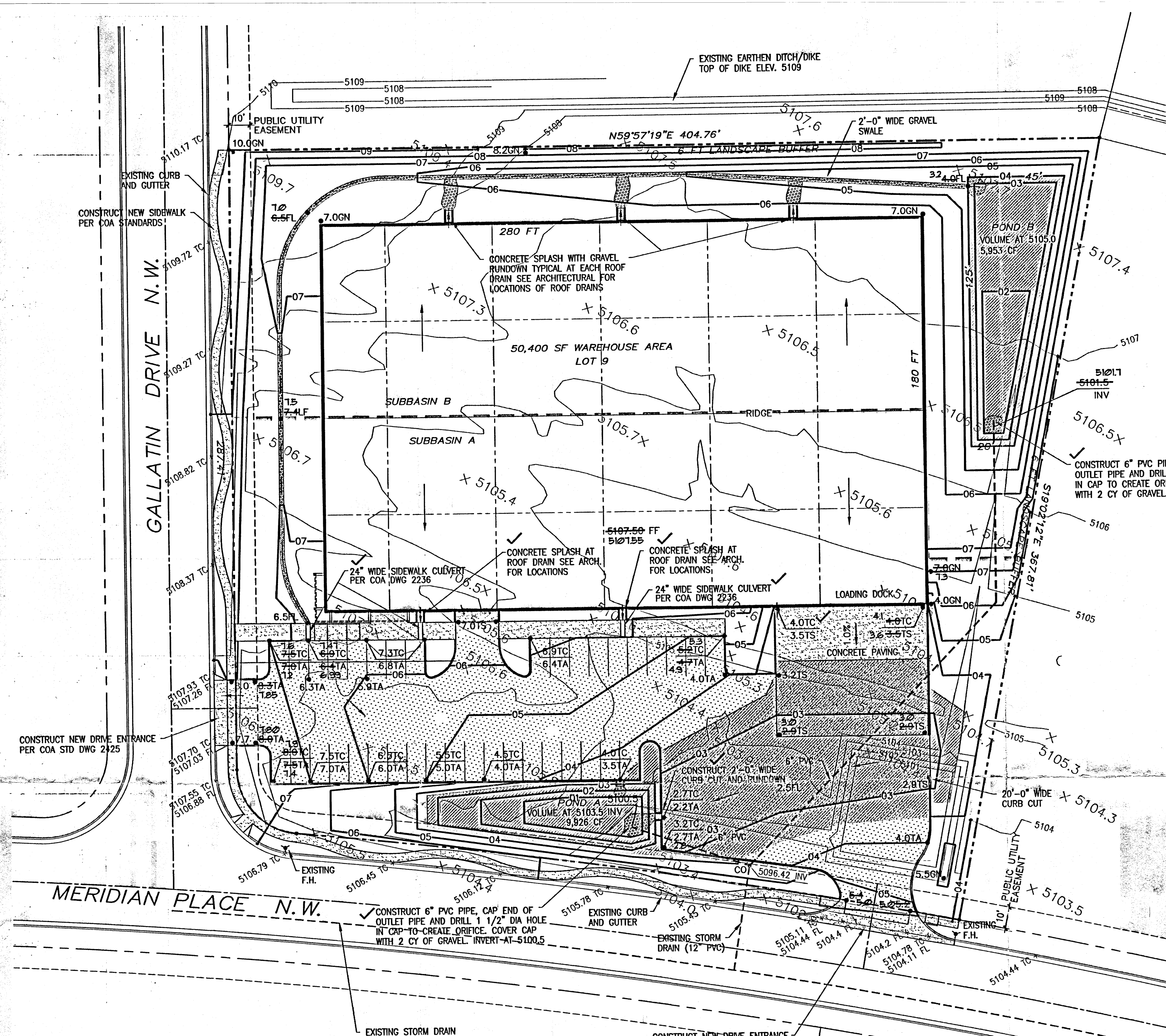
T_b = 0.2 HR 0.25 Ad/At = 0.25(0.58) = 0.145 HR
T_p = 2.107 E At/Op - 0.25 Ad/At = 0.745 HR
T_t = (0.7 Tc) + ((1.6 - Ad/At)/(12)) = 0.234 HR
DISCHARGE RATE = 0.1 (1.22) = 0.12 CFS
V_{required} = 5.622 CF

POND VOLUME POND B

VOLUME @ ELEV 5105.0
V = [0.5*(4062+2(3146)+1035)*1.0+0.5*(1035)*0.5] = 5,953 CF

DISCHARGE PIPE SIZES AT POND B

USE 1 3/4" DIA ORIFICE AREA = 2.41 IN SQ = 0.0167 SF
Q = 0.60 (0.0167) $\sqrt{2 (32.2) (2.5)}$ = 0.13 CFS



ADDRESS:

7301 MERIDIAN PLACE
LOT 9, MERIDIAN BUSINESS PARK

CONSTRUCTION NOTES

1. TWO WORKING DAY PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CALL FOR LOCATION OF EXISTING UTILITIES.
2. ALL WORK WITHIN THE CITY RIGHT OF WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE CITY OF ALBUQUERQUE STANDARD AND PROCEDURE.
3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS, LAWS, AND RULES CONCERNING SAFETY AND HEALTH.
4. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY THE EXISTING SITE CONDITIONS AND INFORM THE ARCHITECT / ENGINEER OF ANY DISCREPANCY BETWEEN THE INFORMATION SHOWN THE PLANS AND THOSE OF THE EXISTING SITE.
5. THE OWNER SHALL VERIFY LOCATIONS OF PONDS WITH GEOTECHNICAL ENGINEER PRIOR TO PROCEEDING WITH ANY CONSTRUCTION WORK ON THIS PROJECT, AND INFORM THE ARCHITECT / ENGINEER OF ANY ADDITIONAL REQUIREMENTS.
6. CONTRACTOR SHALL PROVIDE THE ARCHITECT / ENGINEER AS BUILT SURVEY FOR ENGINEER'S CERTIFICATION.

1/2/03 REVISED GRADING FOR FIRE ACCESS & LOWER FF ELEVATION
REVISION



GRADING PLAN

FEBRUARY 12, 2003

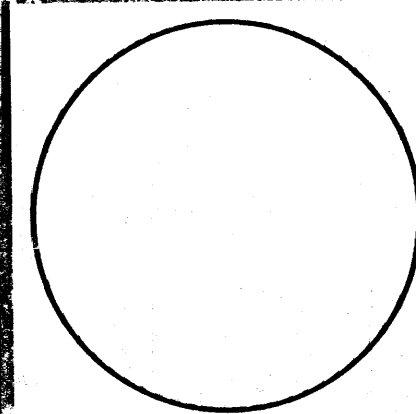
1"=30'-0"



CLAUDIO VIGIL ARCHITECTS

MYGRANT GLASS MERIDIAN LOT 9

7301 MERIDIAN PLACE NW
ALBUQUERQUE, NEW MEXICO

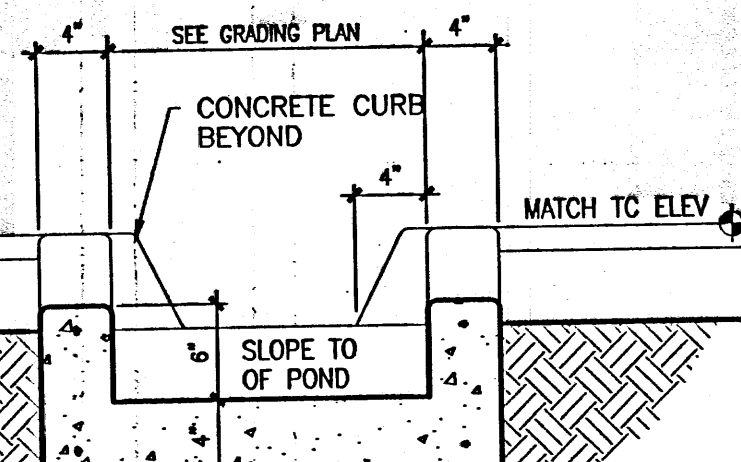


SHEET
C-1

PROJECT NUMBER
02075

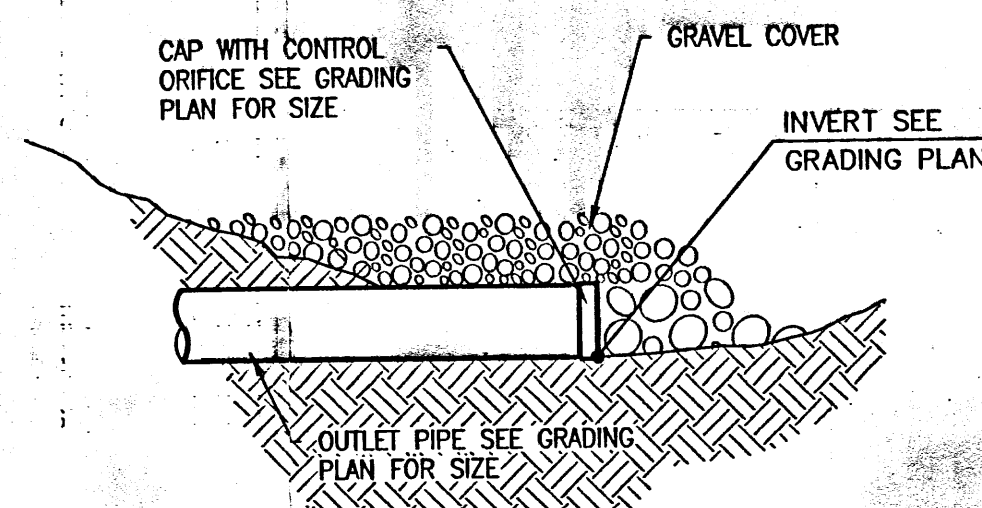
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1801 Rio Grande NW, #2, Albuquerque, NM 87104
Phone: 505/842-1113 Fax: 505/842-1330



1 CONCRETE RUNDOWN

3/4"=1'-0"



2 OUTLET PIPE DETAIL

3/4"=1'-0"

I, JOHN ARTHUR BLESSEN, NMPE 13481, OF THE FIRM CLAUDIO VIGIL ARCHITECTS, HEREBY CERTIFY THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 3/28/03. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENTS HAS BEEN OBTAINED BY ME OR UNDER MY DIRECT SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR PERMANENT CERTIFICATE OF OCCUPANCY.

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

John Arthur Blessen 3/2/03
John Arthur Blessen, PE
NM PE# 13481



- LEGEND:
- 51.0 EXISTING SPOT ELEVATION
 - 51.00 NEW SPOT ELEVATION
 - 51 EXISTING CONTOUR
 - 51 NEW CONTOUR
 - SWALE
 - VERIFIED ELEVATION
 - AS BUILT ELEVATION
 - BASIN BOUNDARY
 - PROPERTY LINE
 - FL FLOW LINE
 - GRID GROUND
 - INV INVERT
 - TA TOP OF ASPHALT
 - TC TOP OF CURB
 - TG TOP OF GRATE
 - TS TOP OF CONCRETE SLAB
 - TW TOP OF WALL
 - TBM TEMPORARY BENCH MARK
 - GRAVEL
 - ASPHALT PAVING
 - CONCRETE