



GRADING/DRAINAGE PLAN

THE FOLLOWING ITEMS CONCERNING (2945 BROADWAY BOULEVARD S.E.) TRACT "A", BLOCK B, SOUTH BROADWAY ACRES, UNIT NO. 1, BERNALILLO COUNTY, ALBUQUERQUE, NEW MEXICO ARE CONTAINED HEREON:

EXISTING CONDITIONS

AS SHOWN BY THE VICINITY MAP, THE SITE CONTAINS 1.34 ACRES MORE OR LESS, AND IS LOCATED JUST NORTH OF THE INTERSECTION OF BROADWAY BLVD. S.E. AND WESMECO DRIVE S.E. ON THE WEST SIDE OF BROADWAY BLVD. S.E. THE SITE IN ITS NATURAL STATE CONTAINS ABOUT 5,450.0 SQ. FT. OF EXISTING BUILDINGS ALONG WITH ABOUT 4,550 SQ. FT. OF ASPHALT PAVING AND ABOUT 11,000 SQ. FT. OF ASPHALT MILLINGS, ALONG WITH 1,660 SQ. FT. OF EXISTING LANDSCAPING. ALL THE DEVELOPED RUN-OFF IS ROUTED TO AN EXISTING PONDING AREA JUST NORTH OF THE PAINT BOOTH BUILDING. NO OFF-SITE FLOWS ENTER THE SITE FROM ANY DIRECTION. ACCORDING TO THE FLOOD INSURANCE RATE MAPS, PANEL 0342Z, REVISED NOVEMBER 19, 2003, THIS SITE IS NOT LOCATED WITHIN A DESIGNATED FLOOD ZONE, NOR DOES IT CONTRIBUTE TO ANY DOWNSTREAM FLOODING.

PROPOSED CONDITIONS

AS SHOWN BY THE GRADING/DRAINAGE PLAN, THE PROJECT WILL CONSIST OF A PROPOSED 4,000 SQ. FT. METAL BUILDING ALONG WITH MORE LANDSCAPED AREAS. NO FURTHER ASPHALT PAVING IS PROPOSED. THE BUILDING WILL BE USED AS PRIVATE GARAGE FOR STORAGE OF VEHICLES THAT HAVE BEEN PAINTED AND NEED A CURING STALL. THE DEVELOPED RUN-OFF WILL BE ROUTED TO THE EXISTING PONDING AREA. THE CALCULATIONS INDICATE A DECREASE IN RUN-OFF BECAUSE OF THE ADDITIONAL LANDSCAPING REQUIRED BY THE ZONING DEPARTMENT. THE CALCULATIONS, WHICH APPEAR HEREON, ANALYSIS THE EXISTING AND PROPOSED 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 D.P.M. VOLUME II, DESIGN CRITERIA DATED 1997 HAS BEEN USED TO QUANTIFY THE PEAK RATE OF DISCHARGE AND VOLUME OF RUN-OFF GENERATED.

PROJECT AREA = 1.34 ac.
PRIVATE GARAGE FOR A & E AUTO SALES
ZONE 2
PRECIPITATION: 360 = 2.35 in.
1440 = 2.75 in.
10day = 3.95 in.

EXCESS PRECIPITATION:	PEAK DISCHARGE:
TREATMENT A 0.53 in.	1.56 cfs/ac.
TREATMENT B 0.78 in.	2.28 cfs/ac.
TREATMENT C 1.13 in.	3.14 cfs/ac.
TREATMENT D 2.12 in.	4.70 cfs/ac.

EXISTING CONDITIONS:	PROPOSED CONDITIONS:
AREA 0 ac.	0 ac.
TREATMENT B 0.0377 ac.	0.1836 ac.
TREATMENT C 0.907 ac.	0.5695 ac.
TREATMENT D 0.49506 ac.	0.5748 ac.

EXISTING EXCESS PRECIPITATION:

Weighted E = (0.53 x 0.00) + (0.78 x 0.04) + (1.13 x 0.81) + (2.12 x 0.50) / 1.34 ac.
= 1.49 in.
V100-360 = (1.49 x 1.34) / 12 = 0.165904 ac-ft = 7227 CF

EXISTING PEAK DISCHARGE:

Q100 = (1.56 x 0.00) + (2.28 x 0.04) + (3.14 x 0.81) + (4.70 x 0.50) = 4.95 CFS

PROPOSED EXCESS PRECIPITATION:

Weighted E = (0.53 x 0.00) + (0.78 x 0.18) + (1.13 x 0.57) + (2.12 x 0.57) / 1.34 ac.
= 1.50 in.
V100-360 = (1.50 x 1.34) / 12.0 = 0.167110 ac-ft = 7279 CF

V100-1440 = (0.17 x 0.57) x (2.75 - 2.35) / 12 = 0.186270 ac-ft = 8114 CF

V100-10day = (0.17 x 0.57) x (3.95 - 2.35) / 12 = 0.243750 ac-ft = 10618 CF

PROPOSED PEAK DISCHARGE:

Q100 = (1.56 x 0.00) + (2.28 x 0.18) + (3.14 x 0.57) + (4.70 x 0.57) = 4.88 CFS

DECREASE 4.88 CFS - 4.95 CFS = 0.07 CFS BECAUSE OF MORE LANDSCAPING

SITE LOCATION

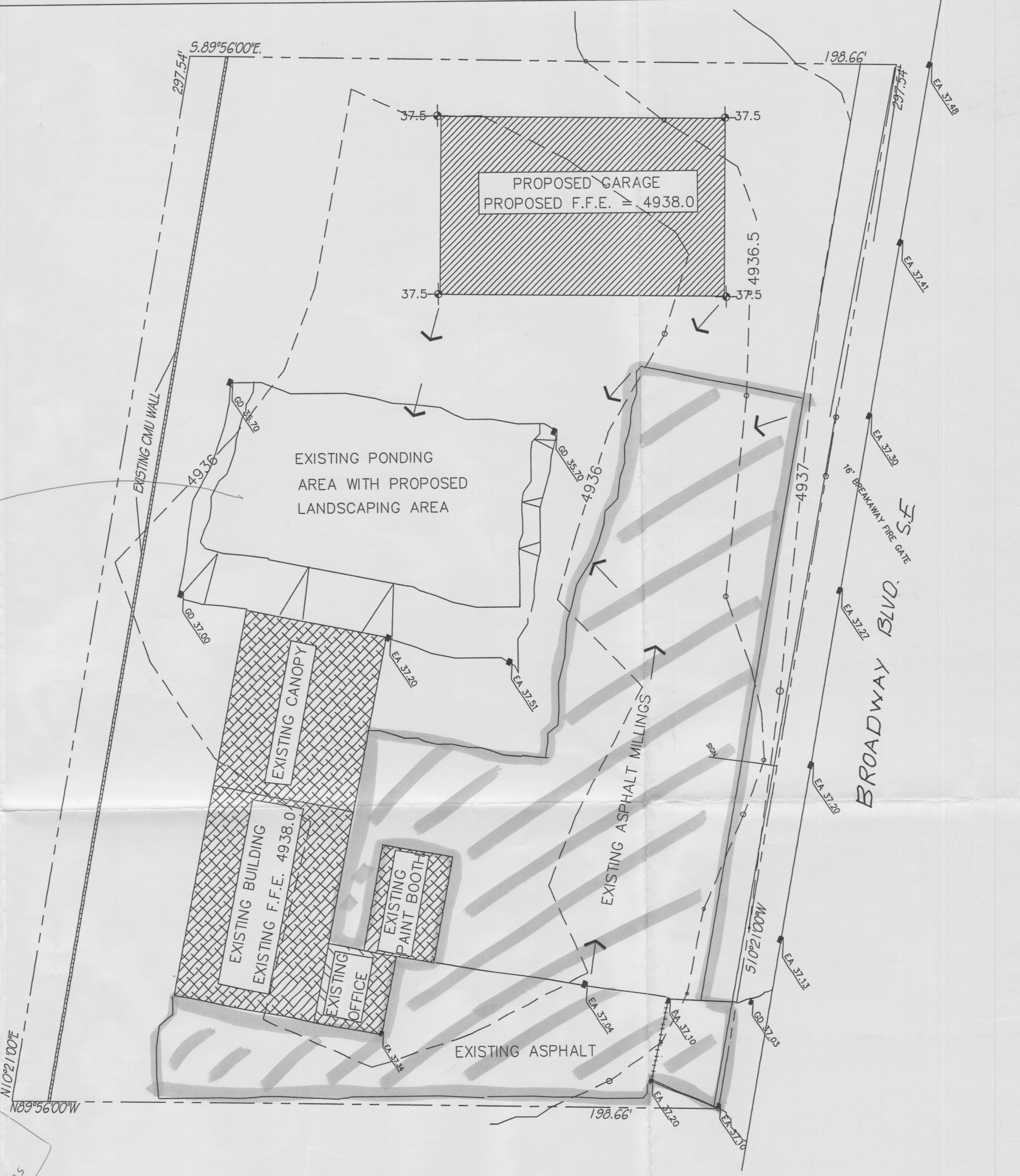
Need Pond
Calcs

How is flow detoured
from existing the site
North?

Exist
Total Bldg Area = 5450 ft²
Total Paving Area = 11000 ft²
Total Landscaping Area = 1660 ft²
Type B
Total Bldg Area = 9450 ft²
Total Paving Area = 11000 ft²
Total Landscaping Area = 7998 ft²
Type D
Total Bldg Area = 11000 ft²
Total Paving Area = 11000 ft²
Total Landscaping Area = 1660 ft²
Type B

All Remaining Area - Type C
Exist = 1.34 - 0.125 - 0.253 = 0.962 ac.
Exist = 0.924 ac.
Proposed = 1.34 - 0.217 - 0.253 = 0.870 ac.
Proposed = 0.870 ac.

1. An excavation/construction permit will be required before beginning any work within the City right-of-way. Approved copy of this plan must be submitted at the time of application for permit.
2. All work detailed in this plan to be performed, except as otherwise stated or provided herein, shall be constructed in accordance with City of Albuquerque Standard Specification for Public Works Construction.
3. Two working days prior to any excavation, contractor must contact line locating Services for locating existing utilities. (260-1990).
4. Prior to construction, the contractor shall excavate and verify the horizontal and vertical location of all construction. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
5. Backfill compaction shall be according to Commercial use.
6. 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.
7. Maintenance of this facilities shall be the responsibility of the owner of the property served.



LEGAL DESCRIPTION

TRACT "A", BLOCK B, SOUTH BROADWAY ACRES - UNIT NO. 1
BERNALILLO COUNTY, ALBUQUERQUE, NEW MEXICO

BENCHMARK:

AN ACS ALUMINUM CAP STAMPED "5-M14" LOCATED
AT THE NORTHEAST CORNER OF THE INTERSECTION OF BROADWAY
AND WOODWARD STREET S.E. M.S.L. ELEVATION: 4937.592

T.B.M.

TOP OF WATER METER LID AT THE INTERSECTION OF BROADWAY BLVD. S.E.
AND WESMECO DRIVE S.E. PAINTED WHITE ELEVATION: 4937.12

EROSION CONTROL MEASURES

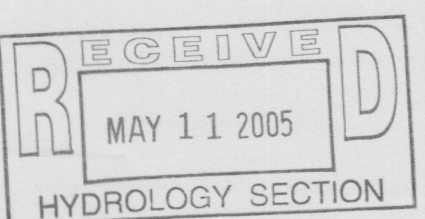
1. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT OF STORM RUN-OFF DURING CONSTRUCTION. HE SHALL ASSURE THAT THE FOLLOWING MEASURES ARE TAKEN:
 - A. ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY TEMPORARY BERMS, DIKES, SWALES, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUN-OFF FROM LEAVING THE SITE AND ENTERING ADJACENT PROPERTY.
 - B. ADJACENT PUBLIC RIGHT-OF-WAY SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUN-OFF FROM THE SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER THE PUBLIC STREETS.
2. THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY OR ALL SEDIMENT WITHIN THE PUBLIC STREETS THAT HAVE BEEN ERODED FROM THE SITE AND DEPOSITED THERE.

SYMBOL LEGEND

EXISTING CONTOUR	4937
PROPOSED CONTOUR	37
EXISTING SPOT ELEVATION	4937
PROPERTY LINE	
EASEMENT LINE	
FLOW DIRECTION	
NEW SPOT ELEVATION	
DOWN SPOUT	

ABBREVIATION LEGEND

TOP OF CON. PAD	- TCP
TOP OF CURB	- TC
TOP OF ASPHALT	- TA
FLOWLINE	- FL
TOP OF WALL	- TW



GRADING/DRAINAGE PLAN 1" = 20'



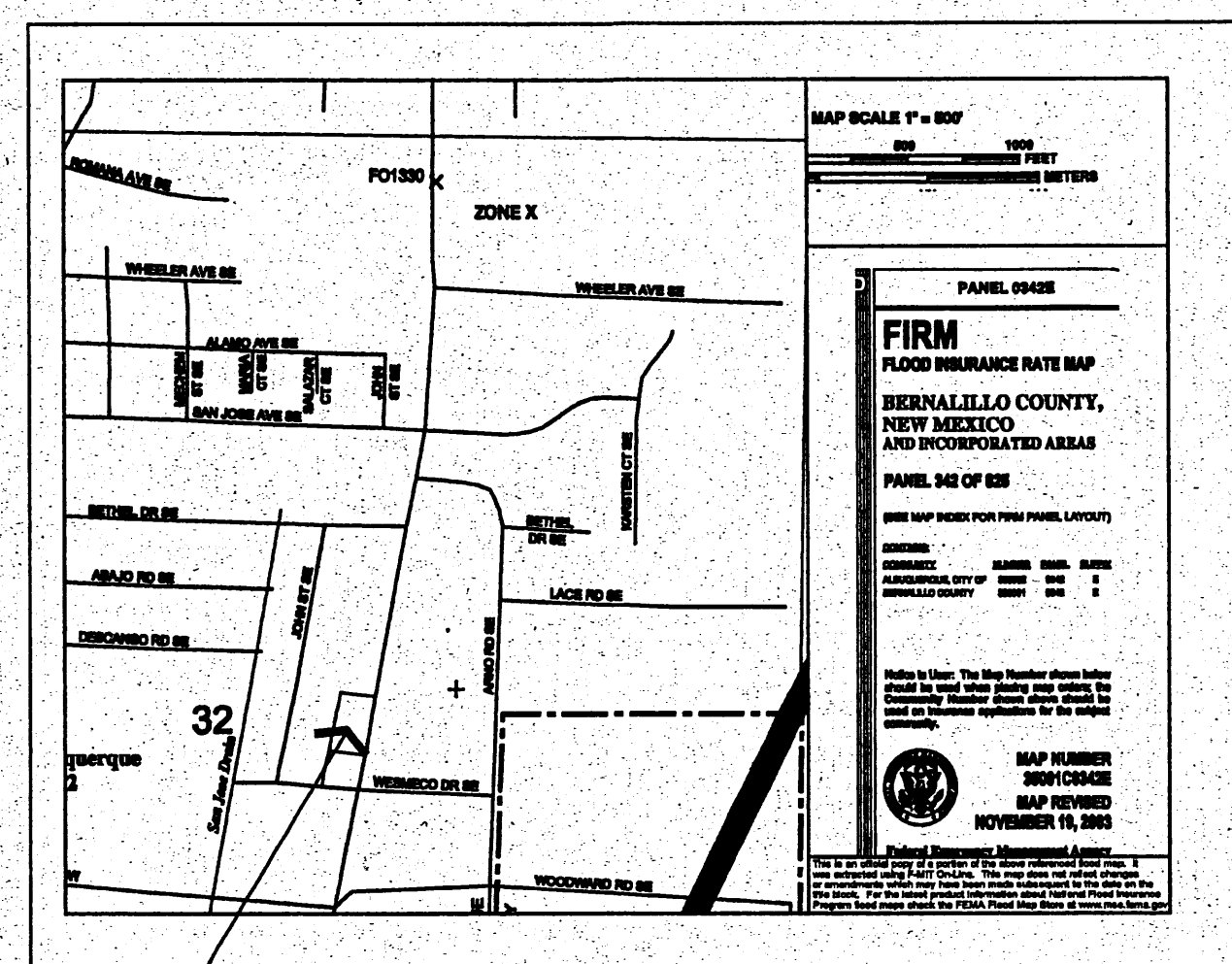
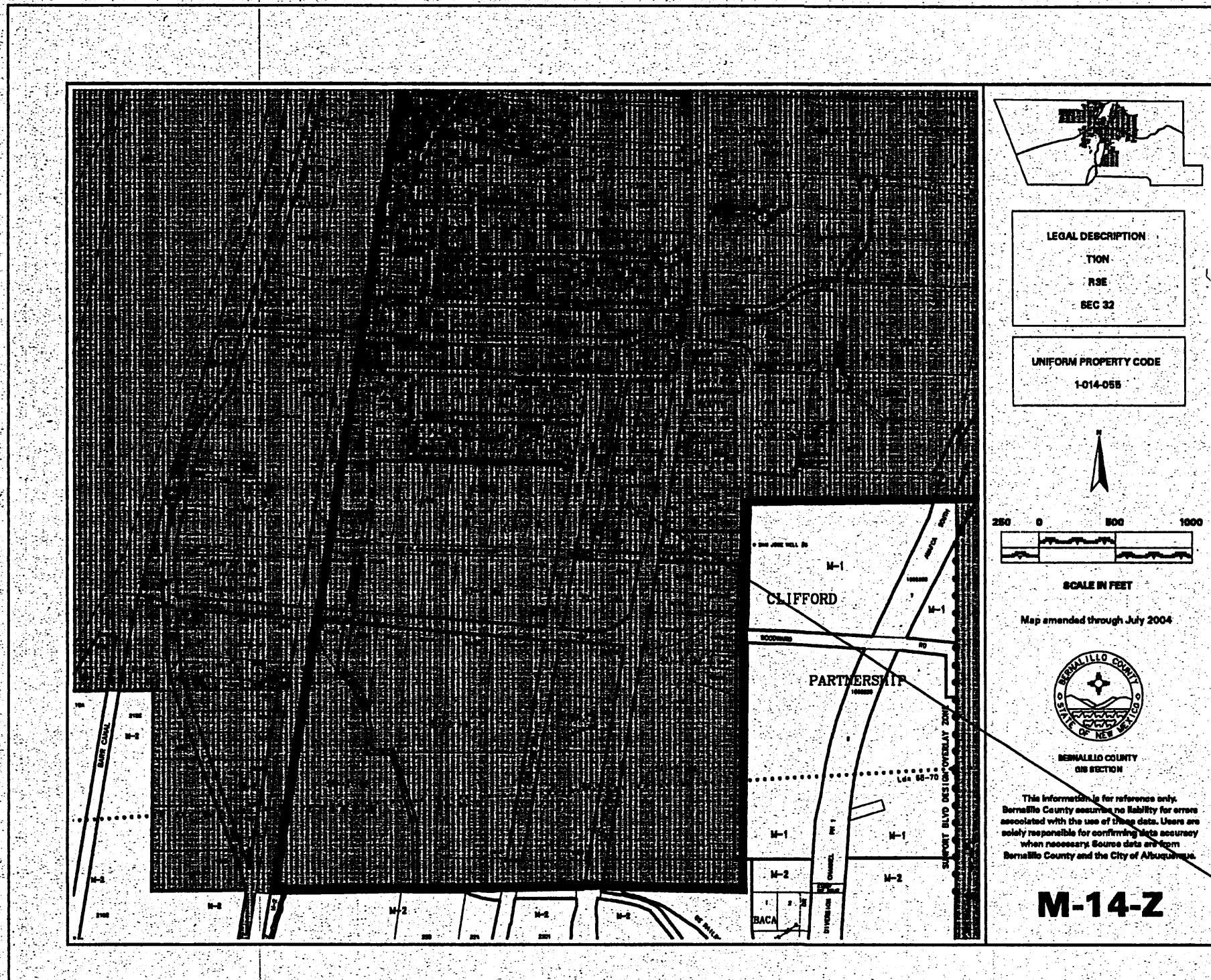
JOB NO:	
DATE:	MAY 2005
REVISIONS	

Sheet Title	GRADING/PAVING PLAN
Drawn By: B.M.	Checked By: B.M.

Project Name	PRIVATE GARAGE FOR EMIGDIO BUSTILLOS A & E AUTO SALES
2945 BROADWAY BOULEVARD S.E. ALBUQUERQUE, NEW MEXICO	

Project Name	PRIVATE GARAGE FOR EMIGDIO BUSTILLOS A & E AUTO SALES
2945 BROADWAY BOULEVARD S.E. ALBUQUERQUE, NEW MEXICO	

SHEET NO. 5 of 5	GD
------------------	----



GRADING/DRAINAGE PLAN

THE FOLLOWING ITEMS CONCERNING (2945 BROADWAY BOULEVARD S.E.) TRACT A, BLOCK B, SOUTH BROADWAY ACRES, UNIT NO. 1, BERNALILLO COUNTY, ALBUQUERQUE, NEW MEXICO ARE CONTAINED HEREON:

EXISTING CONDITIONS

AS SHOWN BY THE VICINITY MAP, THE SITE CONTAINS 1.34 ACRES MORE OR LESS, AND IS LOCATED JUST NORTH OF THE INTERSECTION OF BROADWAY BLVD. S.E. AND WESMECO DRIVE S.E. ON THE WEST SIDE OF BROADWAY BLVD. S.E. THE SITE IN ITS NATURAL STATE CONTAINS ABOUT 5,450.0 SQ. FT. OF EXISTING BUILDINGS ALONG WITH ABOUT 4,550 SQ. FT. OF ASPHALT PAVING AND ABOUT 11,000 SQ. FT. OF ASPHALT MILLINGS, ALONG WITH 1,660 SQ. FT. OF EXISTING LANDSCAPING. ALL THE DEVELOPED RUN-OFF IS ROUTED TO AN EXISTING PONDING AREA JUST NORTH OF THE PAINT BOOTH BUILDING. NO OFF-SITE FLOWS ENTER THE SITE FROM ANY DIRECTION. ACCORDING TO THE FLOOD INSURANCE RATE MAPS, PANEL 0342E, REVISED NOVEMBER 19, 2003, THIS SITE IS NOT LOCATED WITHIN A DESIGNATED FLOOD ZONE, NOR DOES IT CONTRIBUTE TO ANY DOWNSTREAM FLOODING.

PROPOSED CONDITIONS

AS SHOWN BY THE GRADING/DRAINAGE PLAN, THE PROJECT WILL CONSIST OF A PROPOSED 4,000 SQ. FT. METAL BUILDING ALONG WITH MORE LANDSCAPED AREAS. NO FURTHER ASPHALT PAVING IS PROPOSED. THE BUILDING WILL BE USED AS PRIVATE GARAGE FOR STORAGE OF VEHICLES THAT HAVE BEEN PAINTED AND NEED A CURING STALL. THE DEVELOPED RUN-OFF WILL BE ROUTED TO THE EXISTING PONDING AREA. THE CALCULATIONS INDICATE A DECREASE IN RUN-OFF BECAUSE OF THE ADDITIONAL LANDSCAPING REQUIRED BY THE ZONING DEPARTMENT. THE CALCULATIONS, WHICH APPEAR HEREON, ANALYSIS THE EXISTING AND PROPOSED 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 D.F.M. VOLUME II, DESIGN CRITERIA DATED 1997 HAS BEEN USED TO QUANTIFY THE PEAK RATE OF DISCHARGE AND VOLUME OF RUN-OFF GENERATED.

PROJECT AREA = 1.34 ac.
PRIVATE GARAGE FOR A & E AUTO SALES TAOS, NEW MEXICO

PRECIPITATION: 360 = 2.35 in.
1440 = 2.75 in.
10day = 3.95 in.

EXCESS PRECIPITATION:	PEAK DISCHARGE:
TREATMENT A 0.53 in.	1.56 cfs/ac.
TREATMENT B 0.78 in.	2.28 cfs/ac.
TREATMENT C 1.13 in.	3.14 cfs/ac.
TREATMENT D 2.12 in.	4.70 cfs/ac.

EXISTING CONDITIONS:	PROPOSED CONDITIONS:
TREATMENT A 0 ac.	0 ac.
TREATMENT B 0.0377 ac.	0.1836 ac.
TREATMENT C 0.807 ac.	0.5695 ac.
TREATMENT D 0.49506 ac.	0.5748 ac.

EXISTING EXCESS PRECIPITATION:

Weighted E = (0.53 x 0.00) + (0.78 x 0.04) + (1.13 x 0.81) + (2.12 x 0.50) / 1.34 ac.
= 1.49 in.

V100-360 = (1.49 x 1.34) / 12 = 0.165904 ac-ft = 7227 CF

EXISTING PEAK DISCHARGE:

Q100 = (1.56 x 0.00) + (2.28 x 0.04) + (3.14 x 0.81) + (4.70 x 0.50) = 4.95 CFS

PROPOSED EXCESS PRECIPITATION:

Weighted E = (0.53 x 0.00) + (0.78 x 0.18) + (1.13 x 0.57) + (2.12 x 0.57) / 1.34 ac.
= 1.50 in.

V100-360 = (1.50 x 1.34) / 12.0 = 0.167110 ac-ft = 7279 CF

V100-1440 = (0.17 x 0.57 x 2.75 - 2.35) / 12 = 0.186270 ac-ft = 8114 CF

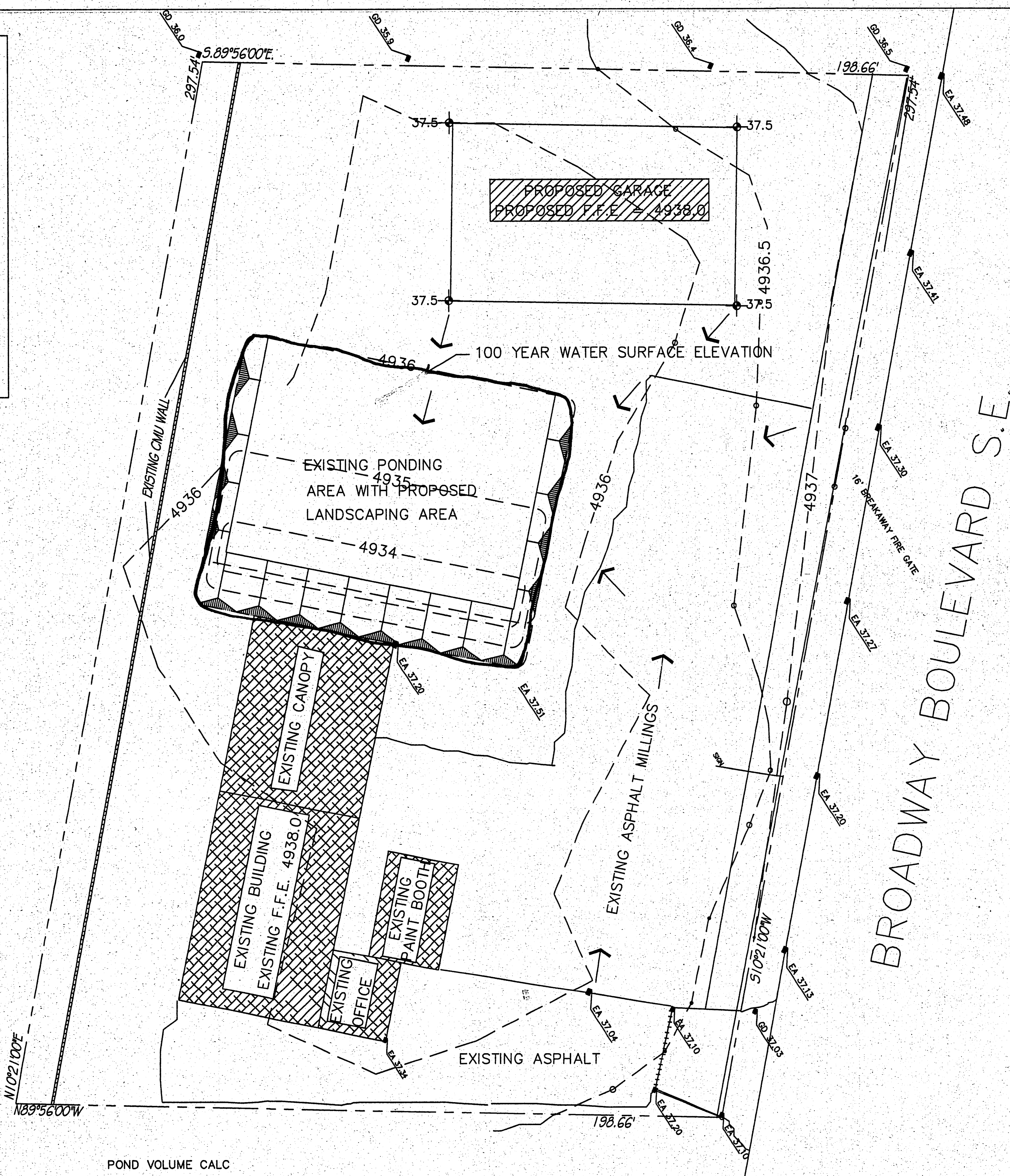
V100-10day = (0.17 x 0.57 x 3.95 - 2.35) / 12 = 0.243750 ac-ft = 10818 CF

PROPOSED PEAK DISCHARGE:

Q100 = (1.56 x 0.00) + (2.28 x 0.18) + (3.14 x 0.57) + (4.70 x 0.57) = 4.88 CFS

DECREASE 4.88 CFS - 4.95 CFS = 0.07 CFS BECAUSE OF MORE LANDSCAPING

SITE LOCATION



POND VOLUME CALC

CONTOUR FT	AREA SQFT	VOLUME CUFT
4936	7,950	
4935	4,820	6,385
4934	3,650	4,235.0
EXISTING POND VOLUME		10,600.0

- An excavation/construction permit will be required before beginning any work within the City right-of-way. Approved copy of this plan must be submitted at the time of application for permit.
- All work detailed in this plan to be performed, except as otherwise stated or provided herein, shall be constructed in accordance with City of Albuquerque Standard Specification for Public Works Construction.
- Two working days prior to any excavation, contractor must contact line locating Services for locating existing utilities, (758-1990).
- Prior to construction, the contractor shall excavate and verify the horizontal and vertical location of all construction. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
- Backfill compaction shall be according to Commercial use.
- 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.
- Maintenance of this facilities shall be the responsibility of the owner of the property served.

EROSION CONTROL MEASURES

- THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT OF STORM RUN-OFF DURING CONSTRUCTION, HE SHALL ASSURE THAT THE FOLLOWING MEASURES ARE TAKEN:
 - ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY TEMPORARY BERMS, DIKES, SWALES, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUN-OFF FROM LEAVING THE SITE AND ENTERING ADJACENT PROPERTY.
 - ADJACENT PUBLIC RIGHT-OF-WAY SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUN-OFF FROM THE SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER THE PUBLIC STREETS.
- THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY OR ALL SEDIMENT WITHIN THE PUBLIC STREETS THAT HAVE BEEN ERODED FROM THE SITE AND DEPOSITED THERE.

SYMBOL LEGEND

EXISTING CONTOUR
PROPOSED CONTOUR
EXISTING SPOT ELEVATION
PROPERTY LINE
EASEMENT LINE
FLOW DIRECTION
NEW SPOT ELEVATION
DOWN SPOUT

ABBREVIATION LEGEND

TOP OF CON. PAD
TOP OF CURB
TOP OF ASPHALT
FLOWLINE
TOP OF WALL

GRADING/DRAINAGE PLAN 1" = 20'



JOB NO.	
DATE:	JUNE 2005
REVISIONS	

Sheet Title	GRADING/PAVING PLAN
Drawn By	B.M.
Checked By	B.M.

Project Name	PRIVATE GARAGE FOR EMIGDIO BUSTILLOS A & E AUTO SALES
Location	2945 BROADWAY BOULEVARD S.E. ALBUQUERQUE, NEW MEXICO

Project Name	PRIVATE GARAGE FOR EMIGDIO BUSTILLOS A & E AUTO SALES
Location	2945 BROADWAY BOULEVARD S.E. ALBUQUERQUE, NEW MEXICO

SHEET NO.	5 OF 5
GD	