DRAINAGE PLAN

I. EXECUTIVE SUMMARY AND INTRODUCTION

THIS PROJECT CONSISTS OF CONSTRUCTION OF AN OFFSITE TEMPORARY POND TO MITIGATE DEVELOPED FLOW VOLUMES, RATES AND ENERGY DISCHARGING TO A HISTORIC OUTFALL FROM THE NEW APS ATRISCO HERITAGE ACADEMY HIGH SCHOOL LOCATED IN THE SOUTHWEST MESA. THE SCHOOL IS CURRENTLY UNDER CONSTRUCTION AND THE COUNTY APPROVED DESIGN INCLUDED A STORM DRAIN OUTFALL TO THE EAST THAT WAS SUPPOSED TO CONNECT TO A NEW STORM DRAIN TO BE CONSTRUCTED BY THE ADJACENT DEVELOPER CONCURRENT WITH CEJA VISTA PHASE 3 CONSTRUCTION. THE ADJACENT PROJECT HAS BEEN DELAYED AND IT IS NOW NECESSARY TO PROVIDE A TEMPORARY FACILITY TO ACCEPT AND MITIGATE THE FLOWS IN THE INTERIM CONDITION UNTIL THE PERMANENT OUTFALL IS CONSTRUCTED. THE PURPOSE OF THIS SUBMITTAL IS TO OBTAIN ROUGH GRADING APPROVAL.

II. PROJECT DESCRIPTION:

AS SHOWN BY VICINITY MAP P-8 HEREON, THE HIGH SCHOOL SITE IS LOCATED AT THE SOUTHEAST CORNER OF DENNIS CHAVEZ BLVD SW AND 118TH STREET SW. THE EXISTING LEGAL DESCRIPTION IS TRACT D, TOMA ALLIANCE GROUP OF NM LLC & WESTLAND DEVELOPMENT CO., INC. THE SCHOOL IS LOCATED WITHIN AN UNINCORPORATED PORTION OF BERNALILLO COUNTY. THE PROPOSED OFFSITE POND IS LOCATED WITHIN INCORPORATED CITY LIMITS FOR WHICH DEVELOPMENT PLANS WERE APPROVED BUT ARE ON HOLD. THE FINAL PLAT WAS NOT RECORDED, AND THE EXISTING LEGAL DESCRIPTION IS TRACT RR-3-A, WESTLAND SOUTH.

AS SHOWN BY PANEL 338 OF 825 OF THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAPS, BERNALILLO COUNTY, NEW MEXICO, AND INCORPORATED AREAS, REVISED 09/26/2008, THE SITE DOES NOT LIE WITHIN A FLOOD HAZARD ZONE. UPSTREAM OFFSITE FLOWS PREVIOUSLY IMPACTING THE SITES WITH AN ASSOCIATED FLOOD HAZARD DESIGNATION WERE DIVERTED INTO A COUNTY MAINTAINED PUBLIC DRAINAGE CONVEYANCE CONSTRUCTED ON THE WEST SIDE OF 118TH STREET SW. THE FLOODPLAIN DOWNSTREAM OF 118TH STREET WAS REMOVED BY A LOMR EFFECTIVE 10/13/05. THE COUNTY CHANNEL ALONG 118TH CONVEYS FLOWS SOUTH TO THE AMAFCA MAINTAINED NORTH BORREGA CHANNEL.

III. REFERENCE DOCUMENTS

THE FOLLOWING IS A LIST OF DOCUMENTS RELATED TO THE SITE AND SURROUNDING AREA. THIS LIST MAY NOT BE INCLUSIVE, HOWEVER, REPRESENTS A SUMMARY OF RELEVANT PLANS AND DOCUMENTS KNOWN TO THE ENGINEER AT THE TIME OF PLAN PREPARATION.

A. DESIGN ANALYSIS REPORT FOR BORREGA DETENTION DAM AND NORTH BORREGA CHANNEL PREPARED FOR AMAFCA BY WILSON & COMPANY DATED APRIL 11, 2000. THIS REPORT PRESENTED AN OVERALL DRAINAGE MANAGEMENT PLAN FOR THE BORREGA DRAINAGE BASIN WITHIN THE AMOLE WATERSHED SOUTHWEST OF THE CITY OF ALBUQUERQUE. IT INCLUDED A HYDROLOGIC ANALYSIS OF THE BASINS DRAINING TO THE DAM AND CHANNEL, AS WELL AS A HYDRAULIC ANALYSIS OF THE DAM AND CHANNEL. THIS REPORT IS THE GOVERNING PLAN FOR DRAINAGE MANAGEMENT IN THE AREA.
B. MASS GRADING PLAN AND PHASES 1, 2 AND 3 GRADING AND DRAINAGE PLAN FOR APS SOUTHWEST HIGH SCHOOL PREPARED BY HIGH MESA CONSULTING GROUP DATED 5/15/2007 AND 6/20/2007, 02/05/2008, AND 06/23/2008 RESPECTIVELY. THESE PLANS, APPROVED BY BERNALILLO COUNTY FOR EACH PHASE, SUPPORTED THE MASS GRADING AND PHASES 1, 2 AND 3 HIGH SCHOOL CONSTRUCTION FOR THE APS HIGH SCHOOL ON TRACT D. THE PHASE 2 PLAN IDENTIFIED THE DOWNSTREAM STORM DRAIN PROPOSED BY CEJA VISTA PHASE 3 AS THE OUTFALL FOR DEVELOPED FLOWS FROM THE BASEBALL FIELD AND TENNIS COURTS (BASINS N-1 AND N-2) WITH A COMBINED PEAK DISCHARGE RATE OF 24 CFS.
C. GRADING AND DRAINAGE PLAN FOR CEJA VISTA SUBDIVISION UNIT 3 BY MARK GOODWIN & ASSOCIATES (NMPE 16454) DATED 1/22/2007. THIS GRADING PLAN SHOWED A TEMPORARY POND LOCATED IMMEDIATELY EAST OF THE HIGH SCHOOL SITE TO ACCEPT EXISTING OFFSITE FLOWS. AFTER COORDINATION WITH THE ENGINEER AND DEVELOPER, THIS PLAN WAS REVISED TO INCLUDE A 24" STORM DRAIN CONNECTION TO MAKE DIRECT CONNECTION TO THE APS SITE.
D. CONCEPTUAL DRAINAGE REPORT FOR CEJA VISTA SUBDIVISION PHASE II PREPARED BY MARK GOODWIN & ASSOCIATES (NMPE 16454) DATED 10/16/2007. THIS REPORT WAS SUBMITTED TO BERNALILLO COUNTY TO SUPPORT A SPECIAL USE PERMIT REQUEST FOR CEJA VISTA PHASE II THAT LIES EAST AND DOWNSTREAM OF THE AREA ADDRESSED BY THE PAAKWEREE TRACTS INCLUDING TRACT D, WHICH IS THE SOUTHWEST HIGH SCHOOL. THE AHYMO ANALYSIS CONTAINED THEREIN ADDRESSES THE ENTIRE WATERSHED AND INCLUDES THE PROPOSED TRACT D (HIGH SCHOOL) CHANGES INCLUDING THE ACCEPTANCE OF 25 CFS FROM THE HIGH SCHOOL AS WELL AS DOWNSTREAM CHANGES ATTRIBUTABLE TO CEJA VISTA DEVELOPMENT.
E. MASTER DRAINAGE REPORT FOR TRACTS B, C & D, PAAKWEREE BULK LAND TRACT BY HIGH MESA CONSULTING GROUP (NMPE 13676) DATED 11/26/2007. THIS REPORT INCLUDED A FULL AHYMO ANALYSIS FOR THE HIGH SCHOOL (TRACT D) AND SURROUNDING TRACTS THAT REPLACED THOSE FROM REFERENCE A (ABOVE) AND COMPLEMENTED THAT FOR REFERENCE D (ABOVE).

IV. EXISTING CONDITIONS:

APS OWNS TRACT D AND PHASE 2 OF THE NEW APS SOUTHWEST HIGH SCHOOL IS CURRENTLY UNDER CONSTRUCTION. THE ENTIRE SITE WAS MASS GRADED IN THE SUMMER OF 2007 IN ADVANCE OF THE PHASE 1 SITE CONSTRUCTION WHICH BEGAN IN SEPTEMBER OF 2007. PHASE 1 INCLUDED THE FIRST SITE BUILDING (9TH GRADE ONLY) AND RELATED PAVING IMPROVEMENTS FOR PARKING AND BUSSES. TEMPORARY RETENTION PONDING WAS PROVIDED TO OFFSET THE CHANGE IN LAND TREATMENT RESULTANT FROM THE MASS GRADING AND PHASE 1 CONSTRUCTION. PHASE 2 BEGIN IN THE SPRING OF 2008 AND IS CURRENTLY UNDER CONSTRUCTION. PHASE 2 CONSTRUCTED A STORM DRAIN STUB TO THE EAST PLANNED FOR EXTENSION BY CEJA VISTA UNIT 3, BUT THIS CONSTRUCTION HAS BEEN DELAYED THEREBY NECESSITATING A TEMPORARY RETENTION/ENERGY DISSIPATION POND AS PROPOSED HEREIN.

V. DEVELOPED CONDITIONS

AS COORDINATED WITH THE DOWNSTREAM DEVELOPERS OF CEJA VISTA, THE VOLUME AND PEAK RATE OF RUNOFF IDENTIFIED TO DRAIN THROUGH THEIR SITE TO THE EAST WILL BE SIGNIFICANTLY REDUCED FROM THAT IDENTIFIED FOR BASIN B-4 EAST IN THE RECORD WILSON PLAN (REF. A). THE PROPOSED DISCHARGE WILL HAVE A PEAK FLOW RATE OF 24 CFS (AS OPPOSED TO 110 CFS PRE-EXISTING). THE DMG REPORT (REF. D) AND HMCG REPORT (REF. E) BOTH INCLUDE OVERALL HYDROLOGIC ANALYSES THAT CONFIRMS THIS.

UNTIL SUCH TIME AS THE DOWNSTREAM CEJA VISTA STORM DRAIN SYSTEM IS CONSTRUCTED, A TEMPORARY RETENTION / ENERGY DISSIPATION POND IS PROPOSED AS PRESENTED HEREIN. BASED ON PRE-DESIGN DISCUSSIONS WITH CITY HYDROLOGY, THIS FACILITY IS TEMPORARY IN NATURE AND THE DEVELOPED RUNOFF IS FAR LESS THAN EXISTING AND WILL BE DIRECTED TO THE HISTORIC OUTFALL. AS SUCH, NO EASEMENT OF DRAINAGE COVENANT IS REQUIRED. THE TWO PROPERTY OWNERS WILL ENTER INTO A PRIVATE PARTY AGREEMENT TO ALLOW CONSTRUCTION AND MAINTENANCE OF THIS FACILITY.

VI. CALCULATIONS

THE CALCULATIONS, WHICH ARE SUMMARIZED HEREON IN TABLE FORM, ANALYZE BOTH THE PRE-DEVELOPMENT AND PROPOSED CONDITIONS FOR THE 100-YEAR, 10-YEAR, 5-YEAR, AND 2-YEAR, 24-HOUR RAINFALL EVENTS. THE ARID LANDS HYDROLOGIC MODELING (AHYMO) PROGRAM MODIFIED FOR USE IN ALBUQUERQUE WAS USED IN ACCORDANCE WITH THE PROCEDURE FOR 40-ACRE AND SMALLER BASINS, AS SET FORTH IN THE REVISION OF SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2, DESIGN CRITERIA, DATED JANUARY, 1993, TO QUANTIFY THE PEAK RATE OF DISCHARGE AND VOLUME OF RUNOFF GENERATED. AS SHOWN BY AHYMO, THE PEAK RATE AND VOLUME OF DISCHARGE FROM THE DEVELOPED BASIN EXCEEDS PRE-DEVELOPMENT CONDITIONS FOR THE 2-YEAR AND 5-YEAR STORM WHEREAS THE PEAK RATE AND VOLUME OF DISCHARGE WILL BE LESS FOR THE 10-YEAR STORM AND LARGER EVENTS. THE PROPOSED INTERIM RETENTION BASIN WILL FULLY RETAIN THE 10-YEAR STORM, THEREBY ENSURING NO DISCHARGE FOR THE 10-YEARS STORM AND MORE FREQUENT EVENTS, WHILE ALSO ENSURING A LARGE REDUCTION FOR LARGER EVENTS.

VII. CONCLUSIONS

1) THIS PLAN IS SUBMITTED FOR GRADING APPROVAL OF A TEMPORARY RETENTION / ENERGY DISSIPATION POND
2) THE PROPOSED DEVELOPMENT WILL ADDRESS THE AN INTERIM CONDITION TO MITIGATE IMPACT TO DOWNSTREAM PROPERTIES AND FACILITIES AND BE CONSISTENT WITH DEVELOPMENT CRITERIA ESTABLISHED BY BERNALILLO COUNTY AND AMAFCA FOR THIS WATERSHED
3) THE PROPOSED DOWNSTREAM CEJA VISTA DEVELOPMENTS WILL NOT BE ADVERSELY IMPACTED BY THESE REVISIONS AND WILL BENEFIT BY THE SIGNIFICANT REDUCTION IN PEAK FLOW RATE AND VOLUME DISCHARGED TO THEIR SYSTEM BY THIS SITE
4) THE TEMPORARY FACILITY IS PROGRAMMED TO AN ULTIMATE OUTFALL.
5) THIS CONSTRUCTION WILL REQUIRE APPROVAL FROM THE UNDERLYING PROPERTY OWNER AND AN AGREEMENT FOR CONSTRUCTION AND MAINTENANCE
6) THERE ARE NO DESIGN VARIANCES OR NEW DRAINAGE EASEMENTS OR COVENANTS ANTICIPATED AT THIS TIME.

GRADING NOTES

1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION – 1986, UPDATE 7, INCLUDING AMENDMENT 1.
2. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM, 260-1990 FOR LOCATION OF EXISTING UTILITIES AND ABASTO UTILITY LOCATING COMPANY (889-3341) FOR THE LOCATION OF EXISTING PRIVATE UTILITIES ON APS PROPERTY.
3. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS CONDUCTED ONLY PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE COMPLETE, THEREFORE, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFORE. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
4. SHOULD A CONFLICT EXIST BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY FOR ALL PARTIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INTERPRETATIONS IT MAKES WITHOUT FIRST CONTACTING THE ENGINEER AS REQUIRED ABOVE.
5. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES DURING CONSTRUCTION.
6. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING SAFETY AND HEALTH.
7. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY.
8. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
9. WHEN APPLICABLE, THE CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" PRIOR TO BEGINNING CONSTRUCTION. AN EXCAVATION PERMIT IS REQUIRED FOR ALL WORK WITHIN PUBLIC RIGHT-OF-WAY.
10. A DISPOSAL SITE FOR ALL EXCESS EXCAVATION MATERIAL (CONTAMINATED OR OTHERWISE), ASPHALTIC PAVING, CONCRETE PAVING, ETC. SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE REGULATIONS. ALL COSTS INCURRED IN OBTAINING A DISPOSAL SITE AND IN HAUL THERETO SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT SHALL BE MADE.
11. A BORROW SITE FOR IMPORT MATERIAL SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE REGULATIONS. ALL COSTS INCURRED IN OBTAINING A BORROW SITE AND IN HAUL THERETO SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT SHALL BE MADE.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SAFELY OBTAINING THE REQUIRED COMPACTION. THE CONTRACTOR SHALL SELECT AND USE METHODS WHICH SHALL NOT BE INJURIOUS OR DAMAGING TO THE EXISTING FACILITIES AND STRUCTURES WHICH SURROUND THE WORK AREAS.
13. THE CONTRACTOR SHALL CONFINE HIS WORK WITHIN THE CONSTRUCTION LIMITS IN ORDER TO PRESERVE THE EXISTING IMPROVEMENTS AND SO AS NOT TO INTERFERE WITH THE OPERATIONS OF THE EXISTING FACILITIES.
14. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
15. ALL FILL SHALL BE FREE FROM VEGETATION, DEBRIS, AND OTHER DELETERIOUS MATERIALS.
16. ALL FILL SHALL BE COMPACTED TO A MINIMUM OF 95% ASTM D-1557 UNLESS A GREATER COMPACTION REQUIREMENT IS OTHERWISE SPECIFIED. ALL EARTHWORK FOR BUILDING PADS SHALL BE PERFORMED IN ACCORDANCE WITH THE STRUCTURAL AND GEOTECHNICAL SPECIFICATIONS.
17. ALL EXISTING UTILITIES ENCOUNTERED WITHIN THE WORK LIMITS SHALL BE ADJUSTED TO GRADE AND SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
18. MAXIMUM UNPROTECTED SLOPES SHALL BE 3:1.
19. ROUGH GRADING TOLERANCES SHALL BE 0.3'.
20. UNDER FEDERAL LAW, THE OPERATOR(S) OF CONSTRUCTION SITES WHERE 1 OR MORE ACRES ARE DISTURBED MUST SUBMIT A NOTICE OF INTENT (N.O.I.) TO OBTAIN COVERAGE UNDER AN NPDES STORM WATER CONSTRUCTION GENERAL PERMIT.
21. **CAUTION: THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR. ALL EXCAVATION, TRENCHING AND SHORING ACTIVITIES MUST BE CARRIED-OUT IN ACCORDANCE WITH OSHA 29 CFR 1926, SUBPART P-EXCAVATIONS.**

CALCULATIONS

CALCULATIONS (FROM AHYMO)

STORM	Q_{100} (PRE-DEVELOPMENT)	Q_{100} (PROPOSED)	V_{100} (PRE-DEVELOPMENT)	V_{100} (PROPOSED)
100-YR	50.78 CFS	24.01 CFS	81,470 CF	33,820 CF
10-YR	12.52 CFS	11.29 CFS	21,340 CF	15,510 CF
5-YR	5.80 CFS	7.71 CFS	10,770 CF	11,490 CF
2-YR	1.28 CFS	2.99 CFS	2,890 CF	5,300 CF

TEMPORARY RETENTION POND VOLUME

ELEVATION	AREA (SF)	VOL (CF)	Σ VOL (CF)
5115	7200		
		17,200	~~17,200~~
5117	10,000		

2 AS-BUILT VOLUME @ ELEVATION 5117 = 17,051 CF > V_{100} (EXCEEDS REQUIREMENTS)

LEGEND

DP	DELINEATOR POST	TS	TRAFFIC SIGN
EA	EDGE OF ASPHALT	WWP	WOOD POWER POLE
FP	FLAG POLE	WVB	WATER VALVE BOX
INV.	INVERT		EXISTING CONTOUR
MP	METAL POST		
OHE(5)	OVERHEAD ELECTRIC (NO. OF LINES)	63	PROPOSED CONTOUR
PM	PAINT MARK		PROPOSED FLOWLINE
SAS MH	SANITARY SEWER MANHOLE		PROPOSED SPOT ELEVATION
SD MH	STORM DRAIN MANHOLE		
TA	TOP OF ASPHALT		PROPOSED CONCRETE
TC	TOP OF CURB		
TCO	TOP OF CONCRETE		PROPOSED ASPHALT PAVEMENT
TOE	BOTTOM OF BANK		
TOP	TOP OF BANK		PROPOSED DIRECTION OF FLOW
TR	TELEPHONE RISER		

EROSION CONTROL MEASURES:

1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY.
2. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
3. WHEN APPLICABLE, CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" FROM THE CITY AND/OR FILE A NOTICE OF INTENT (N.O.I.) WITH THE EPA PRIOR TO BEGINNING CONSTRUCTION.
4. UNLESS FINAL STABILIZATION IS OTHERWISE PROVIDED FOR, ANY AREAS OF EXCESS DISTURBANCE (TRAFFIC ACCESS, STORAGE YARD, EXCAVATED MATERIAL, ETC.) SHALL BE RE-SEEDED ACCORDING TO C.O.A. SPECIFICATION 1012 "NATIVE GRASS SEEDING". THIS WILL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.

INDEX OF DRAWINGS

1. DRAINAGE PLAN, CALCULATIONS, VICINITY MAP, FIRM, LEGEND & INDEX OF DRAWINGS
2. OFFSITE GRADING SITE PLAN
3. CONSTRUCTION DETAIL

2 ENGINEER'S CERTIFICATION

I, J. GRAEME MEANS, NMPE 13676, OF THE FIRM HIGH MESA CONSULTING GROUP HEREBY CERTIFY THAT THE SITE HAS BEEN CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED GRADING PLAN DATED 04/28/2009.

THE FOLLOWING DEVIATION WAS NOTED THAT DOES NOT PRECLUDE THE DETERMINATION THAT THE PROJECT HAS BEEN COMPLETED IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED PLAN.

1) THE LOCATION OF THE PIPE CONNECTION WAS ADJUSTED IN RESPONSE TO A VERTICAL CONFLICT WITH AN EXISTING WATER LINE. THE REVISED LOCATION IS SHOWN ON THE PLAN.

THE RECORD SUPPLEMENTAL SURVEY INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT WAS OBTAINED SEPTEMBER 11, 2009 UNDER THE DIRECT SUPERVISION OF CHARLES G. CALA, JR., NMPS 11184, ALSO OF THE FIRM HIGH MESA CONSULTING GROUP. I FURTHER CERTIFY THAT I PERSONALLY VISITED THE PROJECT SITE AND DETERMINED BY VISUAL INSPECTION THAT THE DATA PROVIDED APPEARS TO BE REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

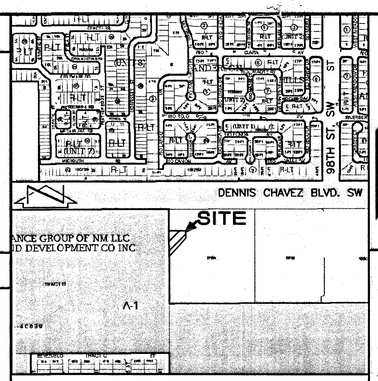
THIS CERTIFICATION IS SUBMITTED TO DOCUMENT SUBSTANTIAL COMPLIANCE OF THE PROJECT.

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

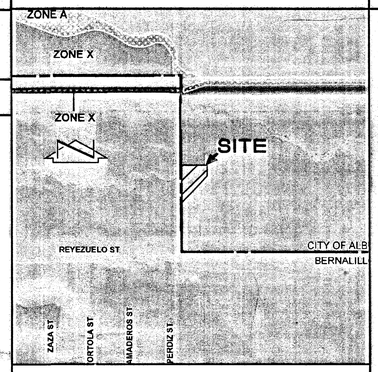
J. GRAEME MEANS, NMPE 13676 — 09/28/2009 DATE

J. GRAEME MEANS NEW MEXICO 13676 REGISTERED PROFESSIONAL ENGINEER

2 **RECORD DRAWING**



D6 VICINITY MAP P-8\P-9
SCALE: 1"=750'



C6 FIRM PANEL 338 OF 825
SCALE: 1"=500'

LEGAL DESCRIPTION

A PORTION OF TRACT RR-3-A, WESTLAND SOUTH PER PLAT FILED 11-14-2005, BOOK 2005C, PAGE 365.

BENCHMARKS (APPLY TO SHEET C-103)

PROJECT BENCHMARK

A 60 PENNY NAIL IN THE EAST SIDE OF THE EAST POLE OF PYLON #69/3 CITY OF ALBUQUERQUE BENCH MARK 1-P9(R).
ELEVATION = 4952.78 FEET (NGVD 1929)

T.B.M. #1

#5 REBAR AND CONTROL CAP STAMPED "NMPS 11184", AS SHOWN ON SHEET 3 OF 3.
ELEVATION = 5127.79 FEET (NGVD 1929)

SURVEY NOTE

THIS IS NOT A BOUNDARY SURVEY. APPARENT PROPERTY CORNERS ARE SHOWN FOR ORIENTATION ONLY. REFER TO SURVEY NOTES ON SHEETS C-102 AND C-103 FOR BASIS OF SURVEY INFORMATION SHOWN ON THOSE SPECIFIC SHEETS.

HIGH MESA Consulting Group
6010-B MIDWAY PARK BLVD. NE
ALBUQUERQUE, NEW MEXICO 87109
PHONE: 505.345.4250 FAX: 505.345.4254
www.highmesacg.com

J. GRAEME MEANS NEW MEXICO 13676 REGISTERED PROFESSIONAL ENGINEER 4/28/09 9/28/09

COVER SHEET
APS ATRISCO HERITAGE ACADEMY HIGH SCHOOL
TEMPORARY OFFSITE POND

NO.	DATE	BY	REVISIONS
1	08/09	G.M.	NO CHANGES THIS SHEET
2	09/09	G.M.	RECORD DRAWING AND CERTIFICATION

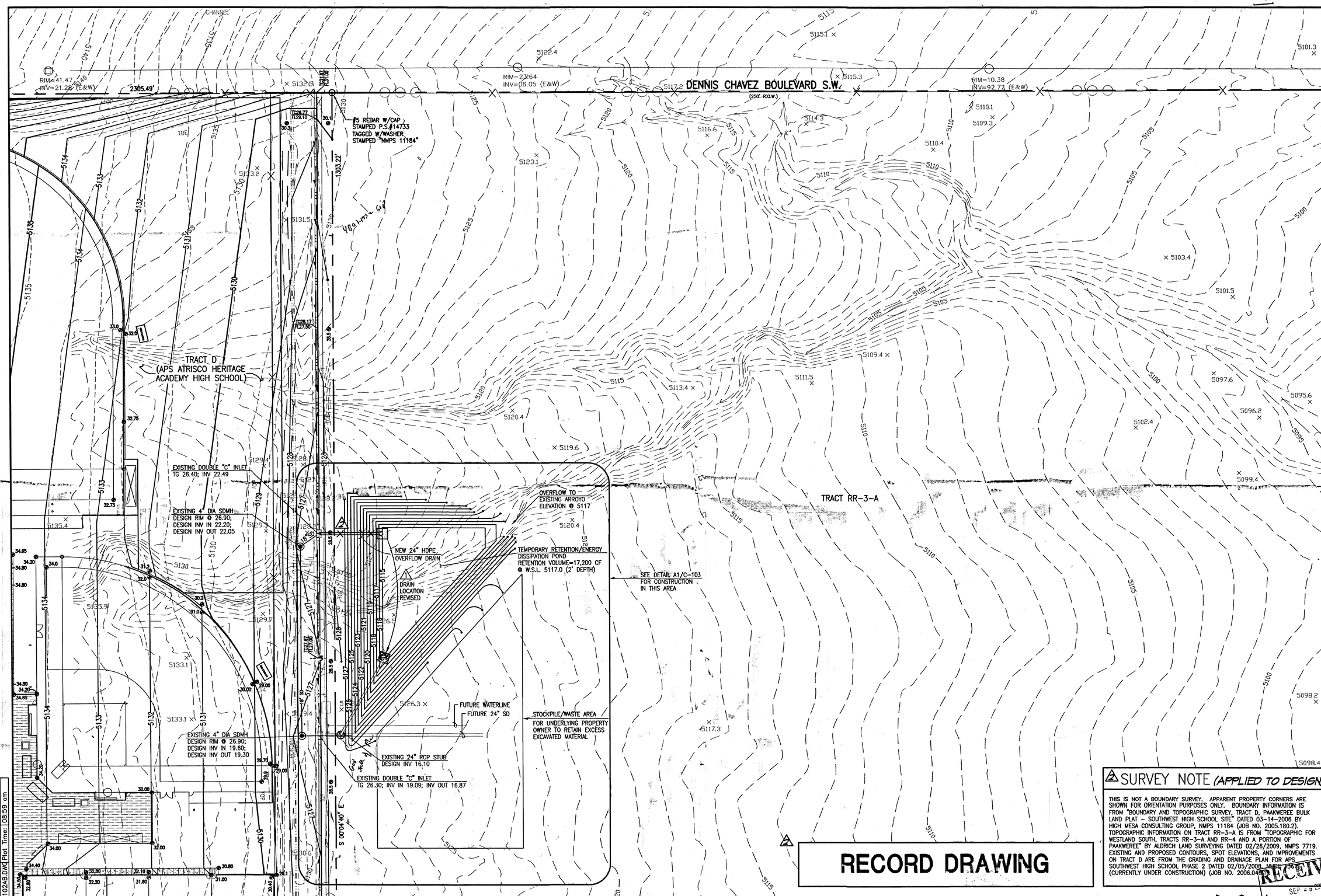
PROJECT No.	2008.189.1
DESIGNED BY	G.M.
DRAWN BY	JLP/DMH/BLE
APPROVED BY	G.M.
SHEET TITLE	DRAINAGE PLAN, CALCULATIONS, VICINITY MAP, FIRM, LEGEND & INDEX OF DRAWINGS

C-101
SHEET 1 OF 3

RECEIVED SEP 29 2009 HYDROLOGY SECTION

A1 DRAINAGE PLAN, CALCULATIONS, VICINITY MAP, FIRM, LEGEND & INDEX OF DRAWINGS

File Path: [illegible] Plot Date: 09-28-2009
File Name: 51804C-101AB.DWG Plot Time: 09:00 am



A1 OFFSITE GRADING PLAN

SCALE: 1" = 40'

SURVEY NOTE (APPLIED TO DESIGN)

THIS IS NOT A BOUNDARY SURVEY. APPARENT PROPERTY CORNERS ARE SHOWN FOR ORIENTATION PURPOSES ONLY. BOUNDARY INFORMATION IS FROM "BOUNDARY AND TOPOGRAPHIC SURVEY, TRACT D, PAAKWEREE BULK LAND PLAT – SOUTHWEST HIGH SCHOOL SITE" DATED 03-14-2006 BY HIGH MESA CONSULTING GROUP, NMPS 11184 (JOB NO. 2005.180.2). TOPOGRAPHIC INFORMATION ON TRACT RR-3-A IS FROM "TOPOGRAPHIC FOR WESTLAND SOUTH, TRACTS RR-3-A AND RR-4 AND A PORTION OF PAAKWEREE" BY ALDRICH LAND SURVEYING DATED 02/26/2009, NMPS 7719. EXISTING AND PROPOSED CONTOURS, SPOT ELEVATIONS, AND IMPROVEMENTS ON TRACT D ARE FROM THE GRADING AND DRAINAGE PLAN FOR APS SOUTHWEST HIGH SCHOOL PHASE 2 DATED 02/05/2008, NMPS 36[illegible] (CURRENTLY UNDER CONSTRUCTION) (JOB NO. 2006.04[illegible]

RECEIVED SEP 2[illegible] 2009 HYDROLOGY SECTION

40 0 80
20 40

HIGH MESA Consulting Group
6010-B MIDWAY PARK BLVD. NE
ALBUQUERQUE, NEW MEXICO 87109
PHONE: 505.345.4250 FAX: 505.345.4254
www.highmesacg.com

LYLE GRAEME MEANS
NEW MEXICO
13676
REGISTERED PROFESSIONAL ENGINEER
4/28/09 9/28/09

GRADING SITE PLAN
APS ATRISCO HERITAGE ACADEMY HIGH SCHOOL
TEMPORARY OFFSITE POND

NO.	DATE	BY	REVISIONS
1	08/09	G.M.	REVISE DRAIN LOCATION
2		G.M.	RECORD DRAWING

PROJECT No.	2008.189.1
DESIGNED BY	G.M.
DRAWN BY	JLP/DMH/BLE
APPROVED BY	G.M.

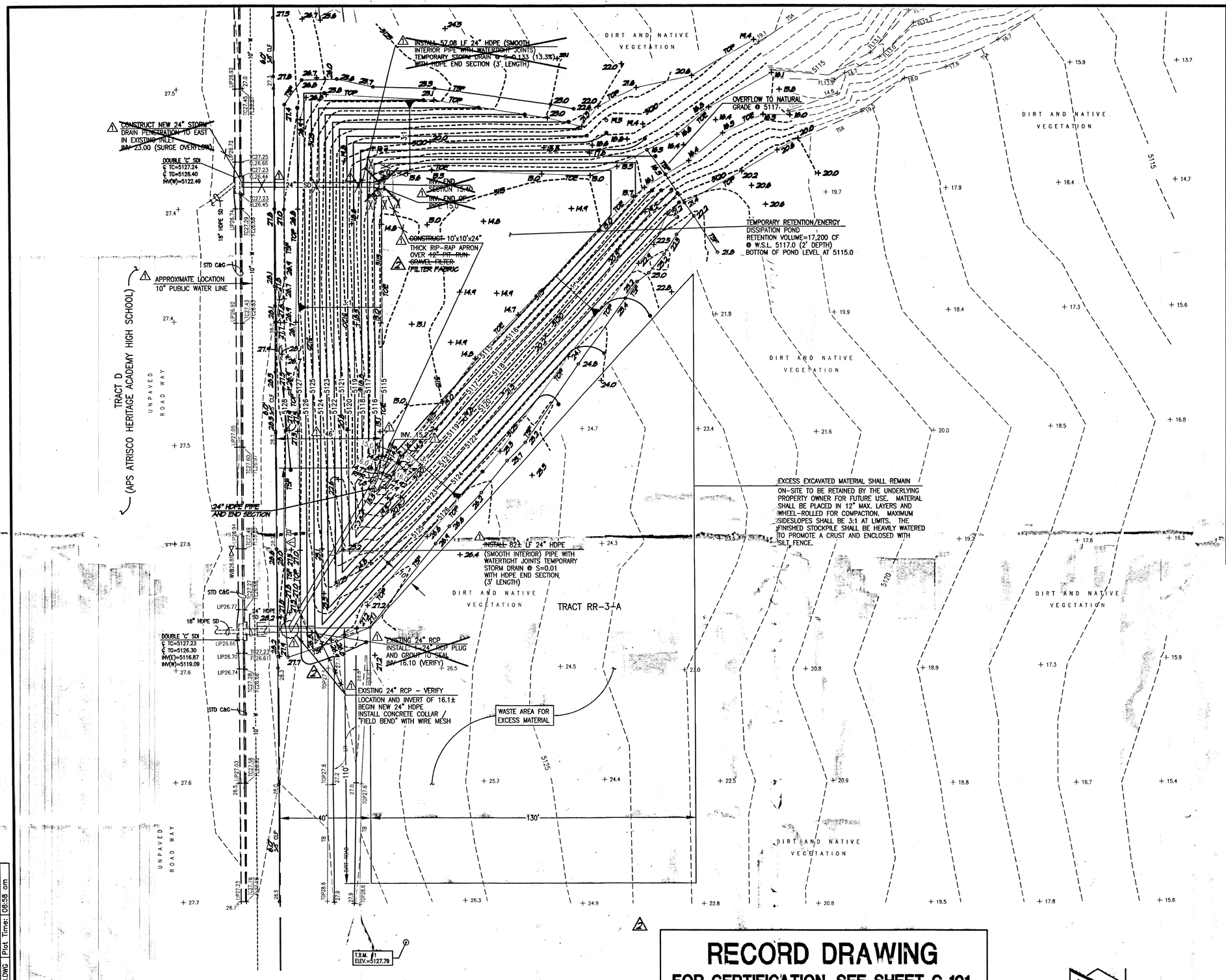
TITLE

GRADING SITE PLAN

C-102

SHEET 2 OF 3

File Path: [illegible]
File Name: 51804C-102AB.DWG Plot Date: 09-28-2009 Plot Time: 08:59 am



A1 CONSTRUCTION DETAIL

SCALE: 1" = 20'

RECORD DRAWING

FOR CERTIFICATION, SEE SHEET C-101

LEGEND

BSA	BOTTOM OF SLOPE (ARROYO)
C&G	CURB AND GUTTER
℄	CENTERLINE
CLF	CHAIN LINK FENCE
ER	EDGE OF DIRT ROAD
FL	FLOW LINE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
INV	INVERT
LIP	LIP OF CURB
SD	STORM DRAIN
SDI	STORM DRAIN INLET
STD	STANDARD
TB	TOP OF BERM
TC	TOP OF CURB
TG	TOP OF GRATE
TOE	TOE OF SLOPE
TOP	TOP OF SLOPE
TSA	TOP OF SLOPE (ARROYO)
WVB	WATER VALVE BOX
—5124—	~~PROPOSED~~ CONTOUR ~~DESIGN~~
– –5125– –	EXISTING CONTOUR
	PROPOSED SLOPE
@ 15.0	DESIGN SPOT ELEVATION
	RIP-RAP

SURVEY NOTE (APPLIED TO DESIGN)

THIS IS NOT A BOUNDARY SURVEY. APPARENT PROPERTY CORNERS ARE SHOWN HEREON FOR ORIENTATION PURPOSES ONLY. BOUNDARY AND TOPOGRAPHIC DATA SHOWN HEREON IS FROM PARTIAL TOPOGRAPHIC SURVEY BY THIS FIRM, DATED 03/03/2009, NMPS 11184. (JOB NO. 2005.180.4)

RECORD DRAWING LEGEND

CONSTRUCT	RECORD INFORMATION (VERIFIED BY ENGINEER)
8.6" 7.4'	RECORD INFORMATION FROM AS-BUILT SURVEY
+ 26.4	RECORD INFORMATION FROM AS-BUILT SURVEY
TOE	TOE OF SLOPE
TOP	TOP OF SLOPE
TSF	TEMPORARY SILT FENCE
RPR	ROCK RIP-RAP
– –5115– –	AS-BUILT CONTOUR

AS-BUILT SURVEY NOTE

AS-BUILT SURVEY INFORMATION IS BASED UPON SUPPLEMENTAL SURVEYING CONDUCTED 09/07/2009. RECORD DATA COLLECTED BY HIGH MESA CONSULTING GROUP, NMPE 13676 (JOB. NO 2008.189.2)

HIGH MESA Consulting Group
6010-B MIDWAY PARK BLVD. NE
ALBUQUERQUE, NEW MEXICO 87109
PHONE: 505.345.4250 FAX: 505.345.4254
www.highmesacg.com

LARENE MEANS NEW MEXICO 13676 REGISTERED PROFESSIONAL ENGINEER 4/23/09 8/28/09 9/29/09

CONSTRUCTION DETAIL
APS ATRISCO HERITAGE ACADEMY HIGH SCHOOL
TEMPORARY OFFSITE POND

NO.	DATE	BY	REVISIONS
1	08/09	G.M.	REVISED DESIGN
2	09/09	G.M.	RECORD DRAWING AND CERTIFICATION

PROJECT No.	2008.189.1
DESIGNED BY	G.M.
DRAWN BY	JLP/DMH/BLE/J.Y.R.
APPROVED BY	G.M.
SHEET TITLE	CONSTRUCTION DETAIL

C-103

SHEET 3 OF 3

RECEIVED SEP 29 2009 HYDROLOGY SECTION

PERMISSION FOR OFFSITE GRADING AND STORM DRAIN OUTLET

PERMISSION GRANTED WITH LETTER AGREEMENT

OWNER OF TRACT RR-3-1 DATE

File Path: G:\MYA\2005.180\AS BUILT PLAN\ Date: 09-28-2009
File Name: 5180-4C-10348.DWG Plot Time: 08:58 am

0576.1106.44500

DRAINAGE PLAN

DRAINAGE PLAN

I. EXECUTIVE SUMMARY AND INTRODUCTION

THE PROPOSED APS HIGH SCHOOL SITE IS LOCATED IN AN UNINCORPORATED AREA OF SOUTHWEST BERNALILLO COUNTY. THIS PLAN IS SUBMITTED FOR MASS SITE GRADING APPROVAL IN ADVANCE OF SPECIFIC PHASED INFRASTRUCTURE AND BUILDING PLANS. THIS MASS GRADING PHASE WILL IMPLEMENT TEMPORARY INTERIM RETENTION PONDING TO OFFSET THE INCREASE IN RUNOFF ATTRIBUTABLE TO GRADING OPERATIONS. ULTIMATELY, THE DEVELOPED SITE WILL DISCHARGE TO DOWNSTREAM PUBLIC OFFSITE DRAINAGE IMPROVEMENTS. SUBSEQUENT SUBMITTALS WILL IDENTIFY, DEMONSTRATE AND JUSTIFY THE FUTURE DEVELOPMENT, DRAINAGE PATTERNS AND REQUIRED INFRASTRUCTURE FOR PHASED DEVELOPMENT. MINOR OFFSITE FLOWS FROM ADJACENT PUBLIC RIGHTS-OF-WAY WILL CONTINUE TO BE ACCEPTED BY THE SITE.

THE PURPOSE OF THIS PLAN IS TO OBTAIN ROUGH GRADING APPROVAL.

SUBSEQUENT SUBMITTALS WILL BE MADE BY THIS OFFICE TO SUPPORT 1) THE CONSTRUCTION OF OFFSITE DOWNSTREAM PUBLIC INFRASTRUCTURE, AND 2) THE PHASED DEVELOPMENT OF A PUBLIC HIGH SCHOOL.

ALTHOUGH THIS SITE LIES WITHIN BERNALILLO COUNTY, IT IS ADJACENT TO CITY OF ALBUQUERQUE LAND AND THE ULTIMATE DRAINAGE OUTFALL IS TO AN AMAFCA FACILITY. COPIES OF THIS PLAN ARE BEING SUBMITTED TO THE CITY OF ALBUQUERUQE AND AMAFCA FOR THEIR INFORMATION.

II. PROJECT DESCRIPTION:

AS SHOWN BY VICINITY MAP P-8 HEREON, THE SITE IS LOCATED AT THE SOUTHEAST CORNER OF DENNIS CHAVEZ BLVD SW AND 118TH STREET SW. THE EXISTING LEGAL DESCRIPTION IS TRACT D, TOMA ALLIANCE GROUP OF NM LLC & WESTLAND DEVELOPMENT CO., INC. THE SITE IS ZONED A-1 AND THE PROPOSED PUBLIC HIGH SCHOOL DEVELOPMENT REQUIRES CONDITIONAL USE PERMIT APPROVAL. A CONDITIONAL USE APPLICATION WAS MADE APRIL 7, 2007 AND THE HEARING IS SCHEDULED FOR MAY 8, 2007.

AS SHOWN BY PANEL 338 OF 825 OF THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAPS, BERNALILLO COUNTY, NEW MEXICO, AND INCORPORATED AREAS, REVISED 10/13/2005, THE SITE DOES NOT LIE WITHIN A FLOOD HAZARD ZONE. UPSTREAM OFFSITE FLOWS PREVIOUSLY IMPACTING THE SITE WITH AN ASSOCIATED FLOOD HAZARD DESIGNATION WERE DIVERTED INTO A COUNTY MAINTAINED PUBLIC DRAINAGE CONVEYANCE CONSTRUCTED ON THE WEST SIDE OF 118TH STREET SW. THIS COUNTY CHANNEL ALONG 118TH CONVEYS FLOWS SOUTH TO THE AMAFCA MAINTAINED BORREGA CHANNEL AND NO LONGER IMPACT THE SITE. THE FEMA FLOOD INSURANCE RATE MAP (FIRM) WAS REVISED TO ELIMINATE THE FLOOD HAZARD DESIGNATION FROM THE SITE.

III. EXISTING CONDITIONS (SHEET C-102):

THE SITE IS UNDEVELOPED (LAND TREATMENT A) WITH AN EXISTING GROUND COVER OF NATIVE VEGETATION. THE SITE SLOPES FROM WEST TO EAST AND IS DIVIDED INTO TWO MAIN DRAINAGE BASINS. THE NORTHERN BASIN (BASIN N) IS CHARACTERIZED BY A BRAIDED ARROYO THAT CARRIED OFFSITE FLOWS PRIOR TO CONSTRUCTION OF THE UPSTREAM PUBLIC DRAINAGE DIVERSION. IT NOW SERVES TO CONCENTRATE AND CONVEY LOCAL ONSITE RUNOFF. THE FLOW PATHS IN THE SOUTHERN BASIN (BASIN S) ARE LESS CONCENTRATED AND DISCHARGE AT THE SOUTHEAST CORNER OF THE SITE. DENNIS CHAVEZ BLVD SW TO THE NORTH IS A FULLY DEVELOPED PUBLIC STREET WITH AN IMPROVED DRAINAGE DITCH ALONG THE SOUTH SIDE. ALTHOUGH THE TOPOGRAPHY IS MOSTLY PARALLEL, SOME MINOR OFFSITE FLOWS MAY ENTER THE SITE FROM THE RIGHT-OF-WAY SOUTH OF THE DITCH.

OFFSITE FLOWS ENTER THE SITE AS SHEET FLOW FROM APPROXIMATELY 2.5 ACRES OF UPSTREAM PUBLIC STREET RIGHT-OF-WAY FOR 118TH STREET SW. THE STREET IS PAVED AND IS SUPERELEVATED SUCH THAT ALL OF THE PAVED SURFACE DRAINS TO THE EAST AND ONTO THE SITE. THE DRAINAGE BASIN CALCULATIONS INCLUDE THESE EXISTING OFFSITE FLOWS FROM PUBLIC STREET RIGHT-OF-WAY.

THE UNDEVELOPED PROPERTY TO THE SOUTH EXHIBITS PARALLEL TOPOGRAPHY AND DOES NOT CONTRIBUTE OFFSITE FLOWS. THE UNDEVELOPED PROPERTY TO THE EAST LIES TOPOGRAPHICALLY LOWER AND IS INCAPABLE OF GENERATING OFFSITE FLOWS.

IV. INTERIM MASS GRADING CONDITIONS (SHEET C-103)

THE PROPOSED MASS GRADING WILL PREPARE THE SITE FOR PHASED DEVELOPMENT OF A HIGH SCHOOL. THE SITE WILL BE STRIPPED AND CLEARED AND GRADED IN A MANNER THAT WILL MINIMIZE THE AMOUNT OF GRADING REQUIRED FOR SUBSEQUENT PHASED DEVELOPMENT.

THE GRADED SITE WILL BE CHARACTERIZED BY TWO DRAINAGE BASINS. THE NORTHERN BASIN (BASIN N) WILL BE MUCH SMALLER THAN THE EXISTING BASIN N. THE SOUTHERN BASIN (BASIN S) WILL BE MUCH LARGER THAN THE EXISTING BASIN S.

THE MASS GRADING PHASE WILL IMPLEMENT TEMPORARY INTERIM RETENTION PONDING TO OFFSET THE INCREASE IN RUNOFF ATTRIBUTABLE TO THE CHANGE IN GROUND COVER AND INFILTRATION RESULTING FROM THE GRADING OPERATIONS. THE POND VOLUMES PROVIDED EXCEED THE INCREASE IN 100 YEAR, 10 DAY RUNOFF VOLUME WITH A SIGNIFICANT NET REDUCTION IN RUNOFF DISCHARGING TO THE DOWNSTREAM PROPERTIES. BASIN N WILL INCLUDE A LARGE SHALLOW (1 FT) LINEAR RETENTION POND/SEDIMENT TRAP ALONG THE EAST PROPERTY LINE OF THE BASIN. BASIN S WILL INCLUDE A DEEPER (5 FT) TRIANGULAR SHAPED POND AT THE SOUTHEAST CORNER OF THE SITE. THE LINEAR BASIN N POND WILL OVERFLOW TO THE SOUTH TO THE LARGER POND WHICH WILL SPILL TO ITS HISTORIC BASIN OUTFALLS IF THE OVERALL SITE VOLUME IS EXCEEDED BY A LARGE RAINFALL EVENT.

BECAUSE THE INTERIM BASIN N POND WILL OVERFLOW TO THE SOUTH, THE PROPOSED CEJA VISTA PHASE 3 DEVELOPMENT EAST OF BASIN N WILL THEREFORE NOT RECEIVE ANY OFFSITE FLOW FROM THE APS SITE IN THE INTERIM MASS GRADED CONDITION. FUTURE SUBMITTALS WILL ADDRESS THE PERMANENT CONDITION IN WHICH CEJA VISTA WILL ACCEPT DEVELOPED RUNOFF FROM THE SCHOOL.

APS PLANS TO BID THE MASS GRADING CONTRACT IN MAY OF 2007 AND BEGIN CONSTRUCTION IN JUNE OF 2007. THE CONTRACTOR WILL BE REQUIRED TO IMPLEMENT AND MAINTAIN THE OWNER'S STORMWATER POLLUTION PREVENTION PLAN (SWPPP) THAT WILL BE PREPARED BY THIS OFFICE. AS SUCH, THE INTERIM PONDS AND ALL SITE BMP'S WILL BE MAINTAINED BY THE CONTRACTOR UNTIL FINAL STABILIZATION IS ACHIEVED. THE PLAN WILL IDENTIFY SILT FENCE, DITCHES, BERMS AND OTHER BEST MANAGEMENT PRACTICE STRUCTURAL MEASURES.

THERE ARE SEVERAL LOCATIONS WITHIN THE SITE WHERE BUILDINGS AND RETAINING WALLS WILL ULTIMATELY RETAIN GRADES. IN THE INTERIM MASS GRADED CONDITION, THESE AREAS WILL BE SLOPED AT A 2:1 (H:V) ON AN INTERIM BASIS. THIS INTERIM SLOPE CONDITION IS ACCEPTABLE BECAUSE IT WILL BE A TEMPORARY INTERIM CONDITION MAINTAINED BY THE OWNER AND CONTRACTOR UNDER THE SWPPP.

A STOCKPILE LOCATION IS DESIGNATED ON THE PLAN FOR TEMPORARY STORAGE OF EXCESS EARTH THAT WILL BE GENERATED BY MASS GRADING OPERATIONS. THIS STOCKPILE WILL BE GRADED WITH MAXIMUM SIDESLOPES OF 2:1 (H:V) AND WILL BE MAINTAINED BY THE OWNER'S CONTRACTOR UNDER THE SWPPP. MAINTENANCE WILL INCLUDE SILT FENCING AND WATERING TO ACHIEVE AN EROSION TOLERANT CRUST.

V. MASS GRADING PLANS (SHEETS C-104 & C-105)

THE GRADING PLANS ON SHEETS C-104 AND C-105 OF THIS SUBMITTAL SHOW: 1) EXISTING GRADES INDICATED BY CONTOURS AT 1.0' INTERVALS AS TAKEN FROM THE TOPOGRAPHIC SURVEY CONDUCTED BY THIS OFFICE DATED 3/14/2006, NMPS 11184, 2) PROPOSED GRADES INDICATED BY PAD ELEVATIONS, SPOT ELEVATIONS, AND CONTOURS AT 1.0' INTERVALS, 3) THE LOCATIONS AND SIZES OF TEMPORARY RETENTION/SEDIMENT PONDS, AND 4) CONTINUITY BETWEEN EXISTING AND PROPOSED INTERIM GRADES.

VI. CALCULATIONS

THE CALCULATIONS, WHICH ARE SUMMARIZED HEREON IN TABLE FORM, ANALYZE BOTH THE EXISTING AND INTERIM MASS GRADED CONDITIONS FOR THE 100-YEAR, 6-HOUR RAINFALL EVENT. THE PROCEDURE FOR 40-ACRE AND SMALLER BASINS, AS SET FORTH IN THE REVISION OF SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2, DESIGN CRITERIA, DATED JANUARY, 1993, HAS BEEN USED TO QUANTIFY THE PEAK RATE OF DISCHARGE AND VOLUME OF RUNOFF GENERATED. WITH THE GUIDANCE OF THE CITY OF ALBUQUERQUE HYDROLOGIST, THE ASSUMED INTERIM CONDITION LAND TREATMENT WAS ASSUMED TO BE SPLIT BETWEEN TREATMENTS B AND C TO REPRESENT THE INFILTRATION CHARACTERISTICS OF GRADED EARTH THAT IS TERRACED. THE EXPECTED INFILTRATION AND ABSTRACTION RATE WILL BE GREATER THAN THAT ASSOCIATED WITH TREATMENT C, BUT LESS THAN THAT ASSOCIATED WITH TREATMENT B. AS SUCH, THE 50/50 SPLIT IS APPROPRIATE.

VII. CONCLUSIONS:

1) THIS PLAN IS FOR MASS GRADING ONLY. 2) SEPARATE SUBMITTALS WILL BE PREPARED AND SUBMITTED BY THIS OFFICE FOR PHASED CONSTRUCTION OF PUBLIC INFRASTRUCTURE AND PHASED SITE DEVELOPMENT. 3) THE PROPOSED DEVELOPMENT IS CONSISTENT WITH DEVELOPMENT CRITERIA ESTABLISHED BY BERNALILLO COUNTY (RETENTION PONDING TO LIMIT DISCHARGE TO PRE-DEVELOPMENT RATES). 4) THE PROPOSED DOWNSTREAM CEJA VISTA UNIT 3 DEVELOPMENT WILL NOT BE ADVERSELY IMPACTED BY THIS GRADING, AND WILL BENEFIT BY THE PROPOSED INTERIM ELIMINATION OF OFFSITE FLOWS FROM THIS SITE. 5) THE OWNER AND CONTRACTOR WILL MAINTAIN THE INTERIM PONDS, SLOPES, STOCKPILE AND GRADING AS REQUIRED BY THE SWPPP TO BE PREPARED BY THIS OFFICE. 6) THERE ARE NO DESIGN VARIANCES, DRAINAGE EASEMENTS OR DRAINAGE COVENANTS ANTICIPATED AT THIS TIME.

GRADING NOTES

1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION – 1986, UPDATE 7, INCLUDING AMENDMENT 1.
2. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM, 260-1990 FOR LOCATION OF EXISTING UTILITIES.
3. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS CONDUCTED ONLY PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE COMPLETE, THEREFORE, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFORE. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
4. SHOULD A CONFLICT EXIST BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY FOR ALL PARTIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INTERPRETATIONS IT MAKES WITHOUT FIRST CONTACTING THE ENGINEER AS REQUIRED ABOVE.
5. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES DURING CONSTRUCTION.
6. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING SAFETY AND HEALTH.
7. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY.
8. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
9. WHEN APPLICABLE, THE CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" PRIOR TO BEGINNING CONSTRUCTION. AN EXCAVATION PERMIT IS REQUIRED FOR ALL WORK WITHIN PUBLIC RIGHT-OF-WAY.
10. A DISPOSAL SITE FOR ALL EXCESS EXCAVATION MATERIAL (CONTAMINATED OR OTHERWISE), ASPHALTIC PAVING, CONCRETE PAVING, ETC. SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE REGULATIONS. ALL COSTS INCURRED IN OBTAINING A DISPOSAL SITE AND IN HAUL THERETO SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT SHALL BE MADE.
11. A BORROW SITE FOR IMPORT MATERIAL SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE REGULATIONS. ALL COSTS INCURRED IN OBTAINING A BORROW SITE AND IN HAUL THERETO SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT SHALL BE MADE.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SAFELY OBTAINING THE REQUIRED COMPACTION. THE CONTRACTOR SHALL SELECT AND USE METHODS WHICH SHALL NOT BE INJURIOUS OR DAMAGING TO THE EXISTING FACILITIES AND STRUCTURES WHICH SURROUND THE WORK AREAS.
13. THE CONTRACTOR SHALL CONFINE HIS WORK WITHIN THE CONSTRUCTION LIMITS IN ORDER TO PRESERVE THE EXISTING IMPROVEMENTS AND SO AS NOT TO INTERFERE WITH THE OPERATIONS OF THE EXISTING FACILITIES.
14. ALL DIMENSIONS AND RADII OF CURB, CURB RETURNS, AND WALLS ARE SHOWN TO THE FACE OF CURB AND/OR WALL.
15. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
16. ALL FILL SHALL BE FREE FROM VEGETATION, DEBRIS, AND OTHER DELETERIOUS MATERIALS AND SHALL HAVE A MINIMUM R VALUE OF 50.
17. ALL FILL SHALL BE COMPACTED TO A MINIMUM OF 95% ASTM D-1557 UNLESS A GREATER COMPACTION REQUIREMENT IS OTHERWISE SPECIFIED. ALL EARTHWORK FOR BUILDING PADS SHALL BE PERFORMED IN ACCORDANCE WITH THE STRUCTURAL AND GEOTECHNICAL SPECIFICATIONS.
18. ALL EXISTING UTILITIES ENCOUNTERED WITHIN THE WORK LIMITS SHALL BE ADJUSTED TO GRADE AND SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
19. THE PAD ELEVATIONS SHOWN HEREON ARE FOR ROUGH GRADING PURPOSES.
20. MAXIMUM UNPROTECTED SLOPES SHALL BE 2:1.
21. ROUGH GRADING TOLERANCES SHALL BE ± 0.1 FT FOR BUILDING PADS AND 0.2' FOR ALL OTHER GRADING.
22. UNDER FEDERAL LAW, THE OPERATOR(S) OF CONSTRUCTION SITES WHERE 1 OR MORE ACRES ARE DISTURBED MUST SUBMIT A NOTICE OF INTENT (N.O.I.) TO OBTAIN COVERAGE UNDER AN NPDES STORM WATER CONSTRUCTION GENERAL PERMIT.
23. CAUTION: THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR. ALL EXCAVATION, TRENCHING AND SHORING ACTIVITIES MUST BE CARRIED-OUT IN ACCORDANCE WITH OSHA 29 CFR 1926, SUBPART P-EXCAVATIONS.

CALCULATIONS

BASIN SUMMARY TABLE (ZONE 1)

BASIN (CONDITION)	AREA (AC)	TREATMENT (AC) A	B	C	D	V100 (CF)	V10-DAY (CF)	Q100 (CFS)
N (EXISTING)	39.9	39.0	0	0.3	0.6	68,070	71,270	53.8
S (EXISTING)	27.7	27.1	0	0.3	0.3	46,250	47,850	37.1
N (INTERIM)	23.8	0	11.9	11.9	0	71,705	71,705	58.3
S (INTERIM)	43.5	0	21.0	21.6	0.9	135,800	140,600	108.6

PONDING REQUIREMENT = INCREASE IN V10-DAY:
V REQUIRED BASIN N = 71,705 – 71,270 = 435 CF (15,000 CF PROVIDED)
V REQUIRED BASIN S = 140,600 – 47,850 = 92,750 CF (105,000 CF PROVIDED)

LEGAL DESCRIPTION

TRACT D OF THE PAAKWEREE BULK LAND PLAT BERNALILLO COUNTY, NEW MEXICO, AS THE SAME IS SHOWN AND DESIGNATED ON THE PLAT FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON DECEMBER 2, 2004, BOOK 2004C-372.

BENCHMARKS

PROJECT BENCHMARK
A 60 PENNY NAIL IN THE EAST SIDE OF THE EAST POLE OF PYLON #69/3
CITY OF ALBUQUERQUE BENCH MARK 1-P9(R)
ELEVATION = 5197.181 FEET (NGVD 1929)

T.B.M. #1
PK MASONRY NAIL AT THE NORTHWEST PROPERTY CORNER AS SHOWN ON THIS SHEET.
ELEVATION = 5213.88 FEET (NGVD 1929)

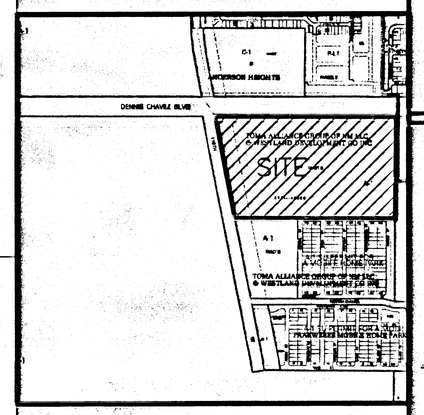
T.B.M. #2
#5 REBAR W/CAP STAMPED P.S.#14733 AT THE SOUTHEAST PROPERTY CORNER AS SHOWN ON THIS SHEET.
ELEVATION = 5124.39 FEET (NGVD 1929)

NOTE

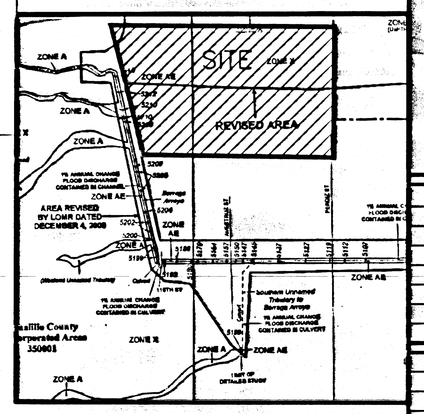
THIS IS NOT A BOUNDARY SURVEY. APPARENT PROPERTY CORNERS ARE SHOWN FOR ORIENTATION ONLY. THE BOUNDARY INFORMATION DEPICTED BY THIS PLAN IS BASED UPON THE BOUNDARY SURVEY CONDUCTED BY THIS FIRM DATED MARCH 14, 2006 (UNRECORDED), NMPS 11184. TOPOGRAPHIC INFORMATION IS BASED UPON A TOPOGRAPHIC SURVEY PREPARED BY THIS OFFICE DATED MARCH 14, 2006, NMPS NO.11184.

LEGEND

DP	DELINEATOR POST
EA	EDGE OF ASPHALT
FP	FLAG POLE
INV.	INVERT
MP	METAL POST
OHE(5)	OVERHEAD ELECTRIC(NO. OF LINES)
PM	PAINT MARK
SAS MH	SANITARY SEWER MANHOLE
SD MH	STORM DRAIN MANHOLE
TA	TOP OF ASPHALT
TC	TOP OF CURB
TCO	TOP OF CONCRETE
TOE	BOTTOM OF BANK
TOP	TOP OF BANK
TR	TELEPHONE RISER
TS	TRAFFIC SIGN
WWP	WOOD POWER POLE
WVB	WATER VALVE BOX
	EXISTING CONTOUR
63	PROPOSED CONTOUR
	PROPOSED FLOWLINE
	PROPOSED SPOT ELEVATION
	PROPOSED CONCRETE
	PROPOSED ASPHALT PAVEMENT
	PROPOSED DIRECTION OF SLOPE



C6 VICINITY MAP P-8
N.T.S.



D6 FIRM PANEL 338
REVISED OCTOBER 13, 2005
N.T.S.

RECEIVED
APR 13 2007
HYDROLOGY SECTION

ARCHITECTS
Fanning Bard Tatum Architects AIA, Ltd.
6100 Indian School Rd. NE Ste 210
Albuquerque NM 87110
Phone 505/883.5200
Facsimile 505/884.5390
Web www.fbtarch.com

PERKINS + WILL
617 W. 7th St.
Suite 1200
Los Angeles, CA 90017
t 213.270.6400
f 213.270.6410
www.perkinswill.com

CONSULTANT

JMA
JEFF MORTENSEN & ASSOCIATES, INC.
6010-B MIDWAY PARK BLVD. N.E.
ALBUQUERQUE, NEW MEXICO 87109
ENGINEERS SURVEYORS
(505) 345-4250 FAX: (505) 345-4254

J. GRAEME MEANS
NEW MEXICO
13676
PROFESSIONAL ENGINEER
4/12/07

Albuquerque Public Schools

SOUTHWEST HIGH SCHOOL

APRIL 12, 2007

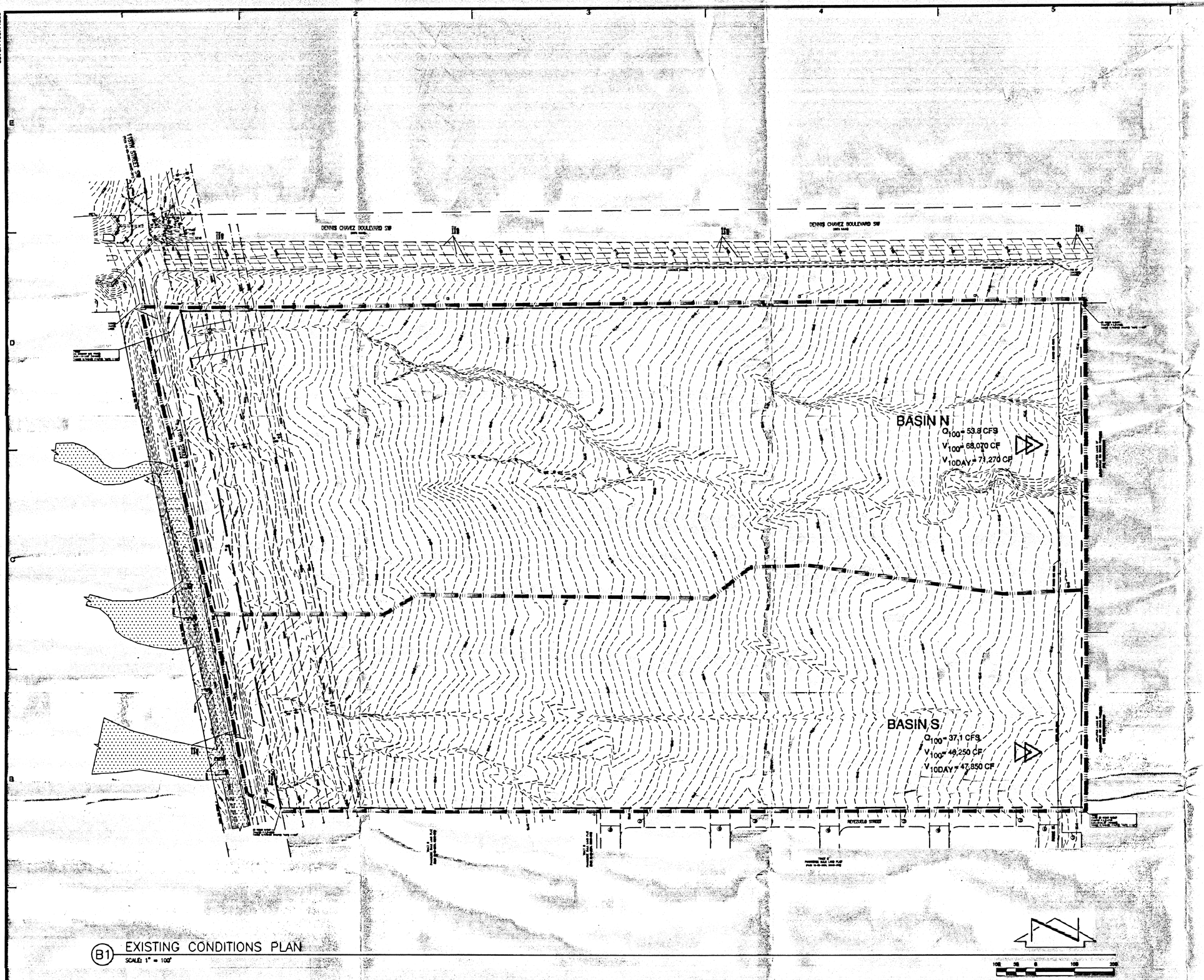
MARK	DATE	DESCRIPTION

PROJECT NO:	2006.046.1
CAD DWG FILE:	60461MGCV
DRAWN BY:	GM
CHECKED BY:	GM

SHEET TITLE
MASS GRADING PLAN
DRAINAGE PLAN, NOTES
CALCULATIONS AND MAPS

C-101

0576.1106.44500



B1 EXISTING CONDITIONS PLAN
SCALE: 1" = 100'

LEGAL DESCRIPTION

TRACT D OF THE PAAKWEREE BULK LAND PLAT
BERNALILLO COUNTY, NEW MEXICO, AS THE SAME IS SHOWN AND DESIGNATED ON THE PLAT FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON DECEMBER 2, 2004, BOOK 2004C-372.

BENCHMARKS

PROJECT BENCHMARK
A 60 PENNY NAIL IN THE EAST SIDE OF THE EAST POLE OF PYLON #69/3
CITY OF ALBUQUERQUE BENCH MARK 1-P9(R)
ELEVATION = 5197.181 FEET (NGVD 1929)

T.B.M. #1
PK MASONRY NAIL AT THE NORTHWEST PROPERTY CORNER AS SHOWN ON THIS SHEET.
ELEVATION = 5213.88 FEET (NGVD 1929)

T.B.M. #2
#5 REBAR W/CAP STAMPED P.S.#14733 AT THE SOUTHEAST PROPERTY CORNER AS SHOWN ON THIS SHEET.
ELEVATION = 5124.39 FEET (NGVD 1929)

NOTE

THIS IS NOT A BOUNDARY SURVEY. APPARENT PROPERTY CORNERS ARE SHOWN FOR ORIENTATION ONLY. THE BOUNDARY INFORMATION DEPICTED BY THIS PLAN IS BASED UPON THE BOUNDARY SURVEY CONDUCTED BY THIS FIRM DATED MARCH 14, 2006 (UNRECORDED), NMPS 11184. TOPOGRAPHIC INFORMATION IS BASED UPON A TOPOGRAPHIC SURVEY PREPARED BY THIS OFFICE DATED MARCH 14, 2006, NMPS NO.11184.

LEGEND

DP	DELINEATOR POST
EA	EDGE OF ASPHALT
FP	FLAG POLE
INV.	INVERT
MP	METAL POST
OHE(S)	OVERHEAD ELECTRIC(NO. OF LINES)
PM	PAINT MARK
SAS MH	SANITARY SEWER MANHOLE
SD MH	STORM DRAIN MANHOLE
TA	TOP OF ASPHALT
TC	TOP OF CURB
TCO	TOP OF CONCRETE
TOE	BOTTOM OF BANK
TOP	TOP OF BANK
TR	TELEPHONE RISER
TS	TRAFFIC SIGNE
WWP	WOOD POWER POLE
WVB	WATER VALVE BOX
	EXISTING CONTOUR
83	PROPOSED CONTOUR
	PROPOSED FLOWLINE
	PROPOSED SPOT ELEVATION
	PROPOSED CONCRETE
	PROPOSED ASPHALT PAVEMENT
	PROPOSED DIRECTION OF SLOPE
	EXISTING BASIN BOUNDARY
	EXISTING FEMA FLOOD HAZARD ZONE

ARCHITECTS

Fanning Bard Tatum Architects AIA, Ltd.
6100 Indian School Rd. NE Ste 210
Albuquerque NM 87110
Phone 505/883.5200
Facsimile 505/884.5390
Web www.fbtarch.com

PERKINS + WILL
617 W. 7th St.
Suite 1200
Los Angeles, CA 90017
t 213.270.8400
f 213.270.8410

CONSULTANT

JEFF MORTENSEN & ASSOCIATES, INC.
6010-B MIDWAY PARK BLVD. N.E.
ALBUQUERQUE, NEW MEXICO 87109
ENGINEERS SURVEYORS
(505) 345-4250 FAX: (505) 345-4254

J. GRAEME MEANS
NEW MEXICO
13676
PROFESSIONAL ENGINEER
04/12/07

Albuquerque Public Schools

SOUTHWEST HIGH SCHOOL

APRIL 12, 2007

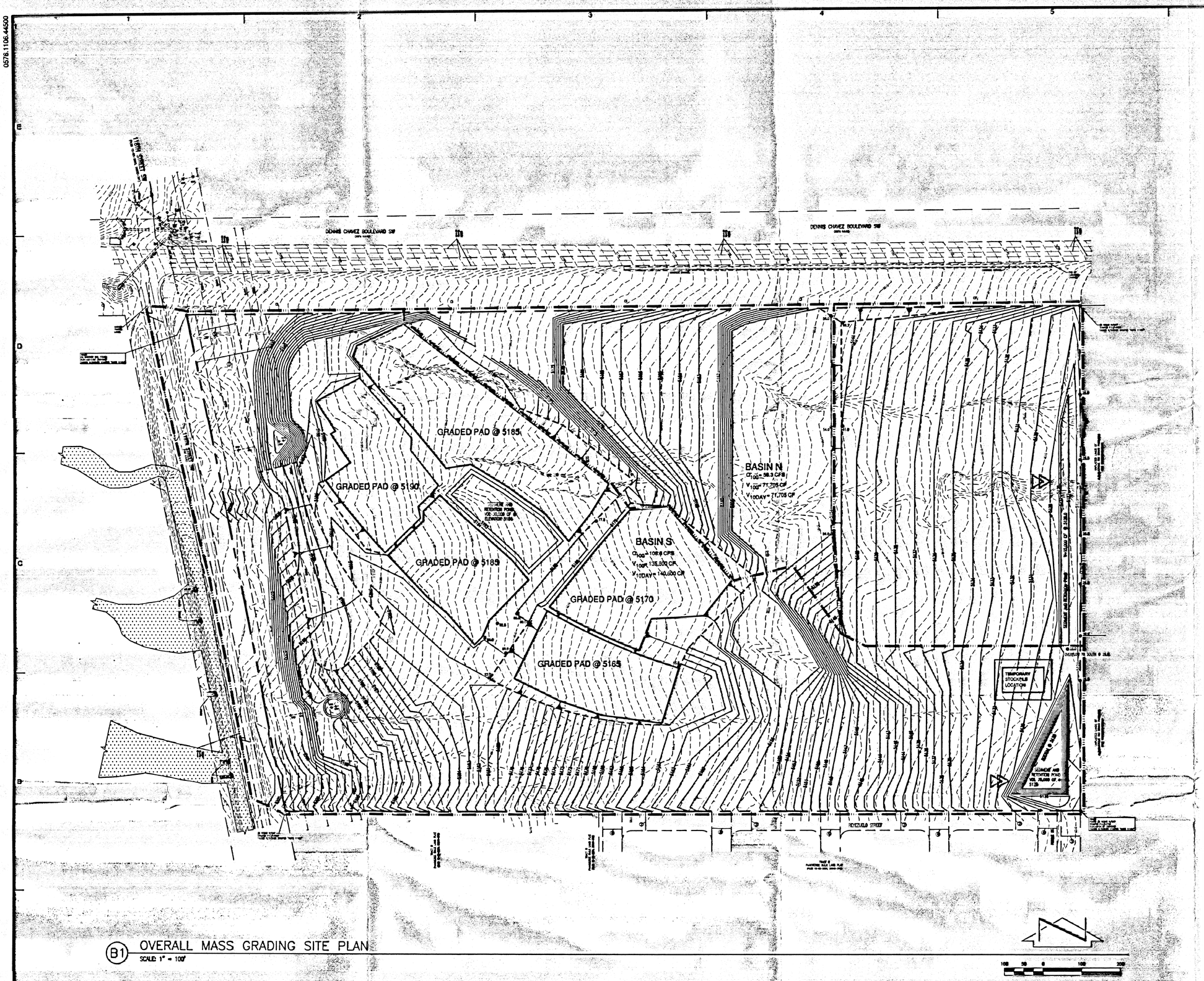
MARK	DATE	DESCRIPTION

PROJECT NO:	2006.048.1
CAD DWG FILE:	60461EC
DRAWN BY:	GM
CHECKED BY:	GM

SHEET TITLE
MASS GRADING PLAN EXISTING CONDITIONS

C-102

0576.1106.44500



B1 OVERALL MASS GRADING SITE PLAN
SCALE: 1" = 100'

LEGAL DESCRIPTION

TRACT D OF THE PAAKWEREE BULK LAND PLAT BERNALILLO COUNTY, NEW MEXICO, AS THE SAME IS SHOWN AND DESIGNATED ON THE PLAT FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON DECEMBER 2, 2004, BOOK 2004C-372.

BENCHMARKS

PROJECT BENCHMARK
A 60 PENNY NAIL IN THE EAST SIDE OF THE EAST POLE OF PYLON #69/3
CITY OF ALBUQUERQUE BENCH MARK 1-P9(R)
ELEVATION = 5197.181 FEET (NGVD 1929)

T.B.M. #1
PK MASONRY NAIL AT THE NORTHWEST PROPERTY CORNER AS SHOWN ON THIS SHEET.
ELEVATION = 5213.88 FEET (NGVD 1929)

T.B.M. #2
#5 REBAR W/CAP STAMPED P.S.#14733 AT THE SOUTHEAST PROPERTY CORNER AS SHOWN ON THIS SHEET.
ELEVATION = 5124.39 FEET (NGVD 1929)

NOTE

THIS IS NOT A BOUNDARY SURVEY. APPARENT PROPERTY CORNERS ARE SHOWN FOR ORIENTATION ONLY. THE BOUNDARY INFORMATION DEPICTED BY THIS PLAN IS BASED UPON THE BOUNDARY SURVEY CONDUCTED BY THIS FIRM DATED MARCH 14, 2006 (UNRECORDED), NMPS 11184. TOPOGRAPHIC INFORMATION IS BASED UPON A TOPOGRAPHIC SURVEY PREPARED BY THIS OFFICE DATED MARCH 14, 2006, NMPS NO.11184.

LEGEND

DP	DELINEATOR POST
EA	EDGE OF ASPHALT
FP	FLAG POLE
INV.	INVERT
MP	METAL POST
OHE(5)	OVERHEAD ELECTRIC(NO. OF LINES)
PM	PAINT MARK
SAS MH	SANITARY SEWER MANHOLE
SD MH	STORM DRAIN MANHOLE
TA	TOP OF ASPHALT
TC	TOP OF CURB
TCO	TOP OF CONCRETE
TOE	BOTTOM OF BANK
TOP	TOP OF BANK
TR	TELEPHONE RISER
TS	TRAFFIC SIGN
WWP	WOOD POWER POLE
WVB	WATER VALVE BOX
	EXISTING CONTOUR
63	PROPOSED CONTOUR
	PROPOSED FLOWLINE
	PROPOSED SPOT ELEVATION
	PROPOSED CONCRETE
	PROPOSED ASPHALT PAVEMENT
	PROPOSED DIRECTION OF SLOPE
	DEVELOPED BASIN BOUNDARY
	EXISTING FEMA FLOOD HAZARD ZONE
	GRADED SLOPE
	LIMITS OF SLOPE

ARCHITECTS
Fanning Bard Tatum Architects AIA, Ltd.
6100 Indian School Rd. NE Ste 210
Albuquerque NM 87110
Phone 505/883.5200
Facsimile 505/884.5390
Web www.fbtarch.com

PERKINS + WILL
617 W. 7th St.
Suite 1200
Los Angeles, CA 90017
t 213.270.8400
f 213.270.8410
www.perkinswill.com

CONSULTANT
JMA
JEFF MORTENSEN & ASSOCIATES, INC.
8010-B MIDWAY PARK BLVD. N.E.
ALBUQUERQUE, NEW MEXICO 87109
ENGINEERS SURVEYORS
(505) 345-4250 FAX: (505) 345-4254

J. GRAEME MEANS
NEW MEXICO
3676
PROFESSIONAL ENGINEER
04/12/2007

Albuquerque Public Schools

SOUTHWEST HIGH SCHOOL

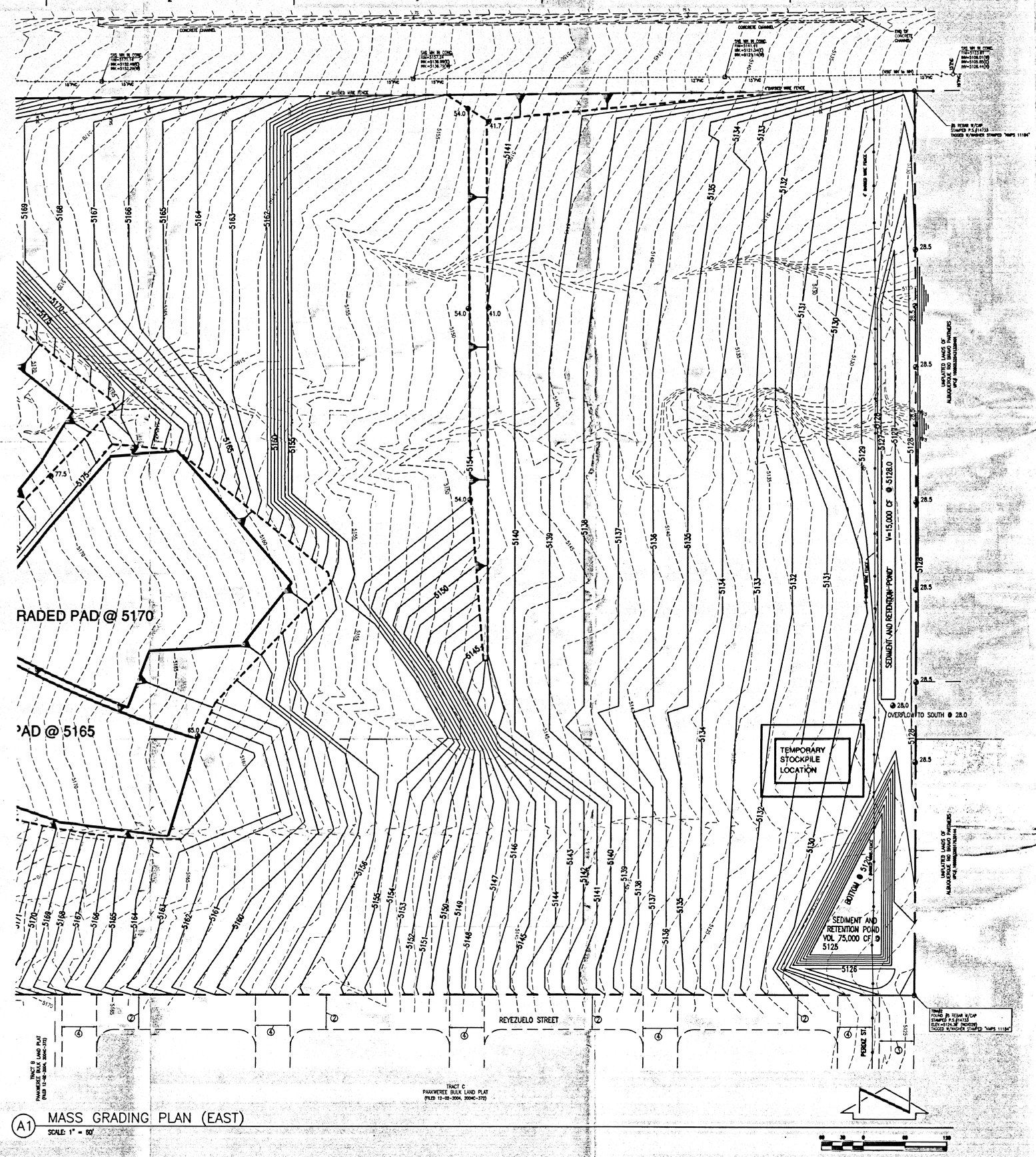
APRIL 12, 2007

MARK	DATE	DESCRIPTION

PROJECT NO:	2006.046.1
CAD DWG FILE:	604611C
DRAWN BY:	GM
CHECKED BY:	GM

SHEET TITLE
MASS GRADING PLAN
OVERALL GRADING
SITE PLAN

C-103



A1 MASS GRADING PLAN (EAST)
SCALE: 1" = 60'

LEGAL DESCRIPTION

TRACT D OF THE PAAKWEREE BULK LAND PLAT BERNALILLO COUNTY, NEW MEXICO, AS THE SAME IS SHOWN AND DESIGNATED ON THE PLAT FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON DECEMBER 2, 2004, BOOK 2004C-372.

BENCHMARKS

PROJECT BENCHMARK

A 60 PENNY NAIL IN THE EAST SIDE OF THE EAST POLE OF PYLON #69/3
CITY OF ALBUQUERQUE BENCH MARK 1-P9(R)
ELEVATION = 5197.181 FEET (NGVD 1929)

T.B.M. #1

PK MASONRY NAIL AT THE NORTHWEST PROPERTY CORNER AS SHOWN ON THIS SHEET.
ELEVATION = 5213.88 FEET (NGVD 1929)

T.B.M. #2

#5 REBAR W/CAP STAMPED P.S.#14733 AT THE SOUTHEAST PROPERTY CORNER AS SHOWN ON THIS SHEET.
ELEVATION = 5124.39 FEET (NGVD 1929)

NOTE

THIS IS NOT A BOUNDARY SURVEY. APPARENT PROPERTY CORNERS ARE SHOWN FOR ORIENTATION ONLY. THE BOUNDARY INFORMATION DEPICTED BY THIS PLAN IS BASED UPON THE BOUNDARY SURVEY CONDUCTED BY THIS FIRM DATED MARCH 14, 2006 (UNRECORDED), NMPS 11184. TOPOGRAPHIC INFORMATION IS BASED UPON A TOPOGRAPHIC SURVEY PREPARED BY THIS OFFICE DATED MARCH 14, 2006, NMPS NO.11184.

LEGEND

DP	DELINEATOR POST
EA	EDGE OF ASPHALT
FP	FLAG POLE
INV.	INVERT
MP	METAL POST
OHE(5)	OVERHEAD ELECTRIC(NO. OF LINES)
PM	PAINT MARK
SAS MH	SANITARY SEWER MANHOLE
SD MH	STORM DRAIN MANHOLE
TA	TOP OF ASPHALT
TC	TOP OF CURB
TCO	TOP OF CONCRETE
TOE	BOTTOM OF BANK
TOP	TOP OF BANK
TR	TELEPHONE RISER
TS	TRAFFIC SIGN
WWP	WOOD POWER POLE
WVB	WATER VALVE BOX

EXISTING CONTOUR
63 PROPOSED CONTOUR
PROPOSED FLOWLINE
PROPOSED SPOT ELEVATION
PROPOSED CONCRETE
PROPOSED ASPHALT PAVEMENT
PROPOSED DIRECTION OF SLOPE
DEVELOPED BASIN BOUNDARY
EXISTING FEMA FLOOD HAZARD ZONE
GRADED SLOPE
LIMITS OF SLOPE

ARCHITECTS
Fanning Bard Tatum Architects AIA, Ltd.
6100 Indian School Rd. NE Ste 210
Albuquerque NM 87110
Phone 505/883.5200
Facsimile 505/884.5390
Web www.fbtarch.com

PERKINS + WILL
617 W. 7th St.
Suite 1200
Los Angeles, CA 90017
t 213.270.8400
f 213.270.8410
www.perkinswill.com

CONSULTANT
JMA
JEFF MORTENSEN & ASSOCIATES, INC.
8010-B MOWRY PARK BLVD. N.E.
ALBUQUERQUE, NEW MEXICO 87109
ENGINEERS SURVEYORS
(505) 345-4250 FAX (505) 345-4254

J. GRAEME MEANS NEW MEXICO 13676 REGISTERED PROFESSIONAL ENGINEER
4/12/07

Albuquerque Public Schools

SOUTHWEST HIGH SCHOOL

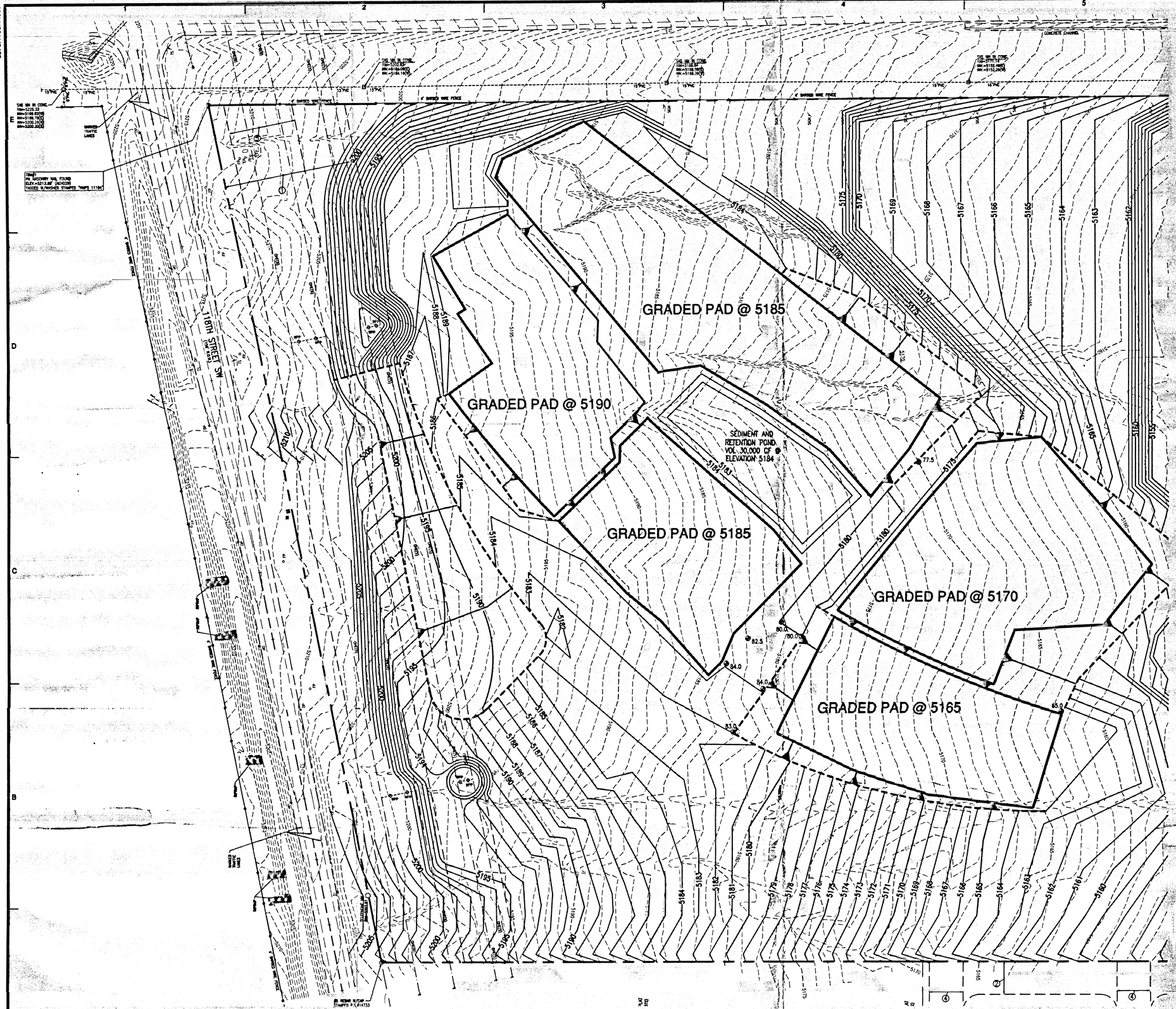
APRIL 12, 2007

MARK	DATE	DESCRIPTION

PROJECT NO:	2006.048.1
CAD DWG FILE:	60461MGE
DRAWN BY:	GM
CHECKED BY:	GM

SHEET TITLE
MASS GRADING PLAN (EAST)

C-104



E1 MASS GRADING PLAN (WEST)
SCALE: 1" = 60'

LEGAL DESCRIPTION

TRACT D OF THE PAAKWEREE BULK LAND PLAT BERNALILLO COUNTY, NEW MEXICO, AS THE SAME IS SHOWN AND DESIGNATED ON THE PLAT FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON DECEMBER 2, 2004, BOOK 2004C-372.

BENCHMARKS

PROJECT BENCHMARK
A 60 PENNY NAIL IN THE EAST SIDE OF THE EAST POLE OF PYLON #69/3
CITY OF ALBUQUERQUE BENCH MARK 1-P9(R)
ELEVATION = 5197.181 FEET (NGVD 1929)

T.B.M. #1
PK MASONRY NAIL AT THE NORTHWEST PROPERTY CORNER AS SHOWN ON THIS SHEET.
ELEVATION = 5213.88 FEET (NGVD 1929)

T.B.M. #2
#5 REBAR W/CAP STAMPED P.S.#14733 AT THE SOUTHEAST PROPERTY CORNER AS SHOWN ON THIS SHEET.
ELEVATION = 5124.39 FEET (NGVD 1929)

NOTE

THIS IS NOT A BOUNDARY SURVEY. APPARENT PROPERTY CORNERS ARE SHOWN FOR ORIENTATION ONLY. THE BOUNDARY INFORMATION DEPICTED BY THIS PLAN IS BASED UPON THE BOUNDARY SURVEY CONDUCTED BY THIS FIRM DATED MARCH 14, 2006 (UNRECORDED), NMPS 11184. TOPOGRAPHIC INFORMATION IS BASED UPON A TOPOGRAPHIC SURVEY PREPARED BY THIS OFFICE DATED MARCH 14, 2006, NMPS NO.11184.

LEGEND

DP	DELINEATOR POST
EA	EDGE OF ASPHALT
FP	FLAG POLE
INV.	INVERT
MP	METAL POST
OHE(S)	OVERHEAD ELECTRIC(NO. OF LINES)
PM	PAINT MARK
SAS MH	SANITARY SEWER MANHOLE
SD MH	STORM DRAIN MANHOLE
TA	TOP OF ASPHALT
TC	TOP OF CURB
TCO	TOP OF CONCRETE
TOE	BOTTOM OF BANK
TOP	TOP OF BANK
TR	TELEPHONE RISER
TS	TRAFFIC SIGN
WWP	WOOD POWER POLE
WVB	WATER VALVE BOX
	EXISTING CONTOUR
63	PROPOSED CONTOUR
	PROPOSED FLOWLINE
	PROPOSED SPOT ELEVATION
	PROPOSED CONCRETE
	PROPOSED ASPHALT PAVEMENT
	PROPOSED DIRECTION OF SLOPE
	DEVELOPED BASIN BOUNDARY
	EXISTING FEMA FLOOD HAZARD ZONE
	GRADED SLOPE
	LIMITS OF SLOPE

ARCHITECTS
Fanning Bard Tatum Architects AIA, Ltd.
6100 Indian School Rd. NE Ste 210
Albuquerque NM 87110
Phone 505/883.5200
Facsimile 505/884.5390
Web www.fbtarch.com

PERKINS +WILL
617 W. 7th St.
Suite 1200
Los Angeles, CA 90017
t 213.270.8400
f 213.270.8410
www.perkinswill.com

CONSULTANT

JEFF MORTENSEN & ASSOCIATES, INC.
8010-B MIDWAY PARK BLVD. N.E.
ALBUQUERQUE, NEW MEXICO 87109
ENGINEERS SURVEYORS
(505) 345-4250 FAX: (505) 345-4254

J. GRAEME MEANS
NEW MEXICO
13676
REGISTERED PROFESSIONAL ENGINEER
4/12/2007

Albuquerque Public Schools

SOUTHWEST HIGH SCHOOL

APRIL 12, 2007

MARK	DATE	DESCRIPTION

PROJECT NO:	2006.046.1
CAD DWG FILE:	60461MGW
DRAWN BY:	GM
CHECKED BY:	GM

SHEET TITLE
MASS GRADING PLAN (WEST)

C-105