2. 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. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INTERPRETATIONS IT MAKES WITHOUT FIRST CONTACTING THE ENGINEER AS REQUIRED ABOVE.

3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.

4. ALL CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.

5. 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 THEREFOR. 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.

EROSION CONTROL MEASURES:

1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE

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

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

LEGAL DESCRIPTION

TRACT 26A-1, VENTANA RANCH, ALBUQUERQUE, NEW MEXICO.

PROJECT BENCHMARK

ACS 3 1/4" ALUMINUM DISC STAMPED "13-B10 2006", SET IN A CONCRETE POST PROJECTING 0.10' ABOVE GROUND, IN THE NORTHEAST QUADRANT OF THE INTERSECTION OF PARADISE BOULEVARD N.W. AND UNIVERSE BOULEVARD N.E.

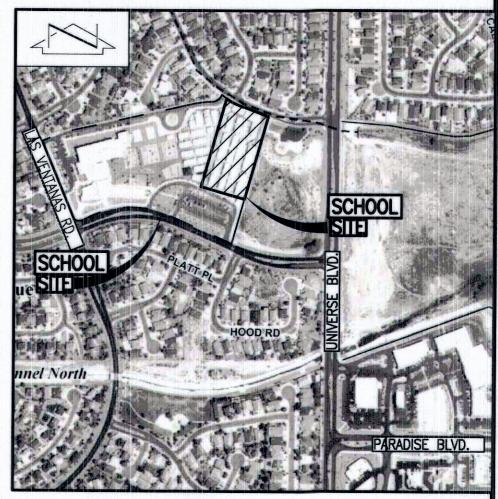
ELEVATION = 5424.810 FEET (NAVD 1988)

T.B.M.

SET #5 REBAR WITH CONTROL CAP STAMPED "HMCG CONTROL NMPS 11184", AS SHOWN ON SHEET 2. ELEVATION = 5432.93 FEET (NAVD 1988)



SCALE: 1" = 750'



SCALE: 1" = 500'

DATE 08-16-2012

INDEX OF DRAWINGS

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1 OF 1	SUPPLEMENTAL SITE AND DRAINAGE INFORMATION
2 OF 7	LANDSCAPE PLAN (FOR INFORMATION ONLY)
6 OF 7	EROSION AND SEDIMENT CONTROL PLAN
7 OF 7	EROSION AND SEDIMENT CONTROL PLAN NOTES AND DETAILS

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

SUPPLEMENTAL SITE AND EROSION CONTROL INFORMATION SYNTHETIC TURF FIELD VENTANA RANCH ELEMENTARY SCHOOL

	1014	ND.	DATE	BY	REVISIONS	^{Jūß Nū.} 2014.180.6
DESIGNED BY	J.G.M.					2014.160.6
DRAWN BY	S.C.C					DATE 04-2015
APPROVED BY	J.G.M					SHEET DF 1

P:\MIA\2014.180.6\ENG\ Plot Date: 04-08-2015 141806_24X18-2.D\MPGot Time: 4:30 pm

- 1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM 260-1990 (ALBUQUERQUE AREA), 1-800-321-ALERT(2537) (STATEWIDE), FOR LOCATION OF EXISTING UTILITIES.
- 2. 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. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INTERPRETATIONS IT MAKES WITHOUT FIRST CONTACTING THE ENGINEER AS REQUIRED ABOVE.
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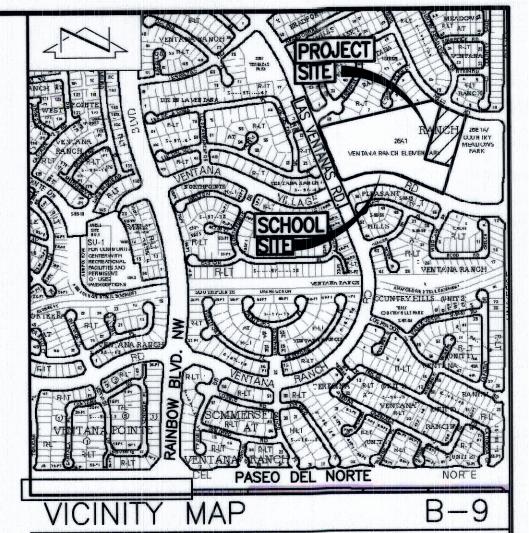
TRACT 26A-1, VENTANA RANCH, ALBUQUERQUE, NEW MEXICO.

PROJECT BENCHMARK

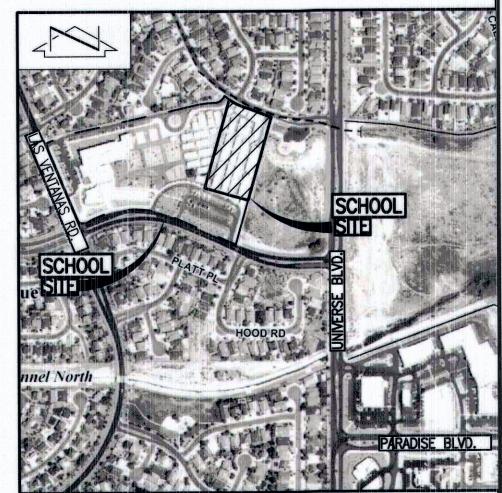
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SCALE: 1" = 750'



PANEL

SCALE: 1" = 500'

825 DATE 08-16-2012

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3 OF 7	DRAINAGE PLAN AND CALCULATIONS
4 OF 7	GRADING PLAN

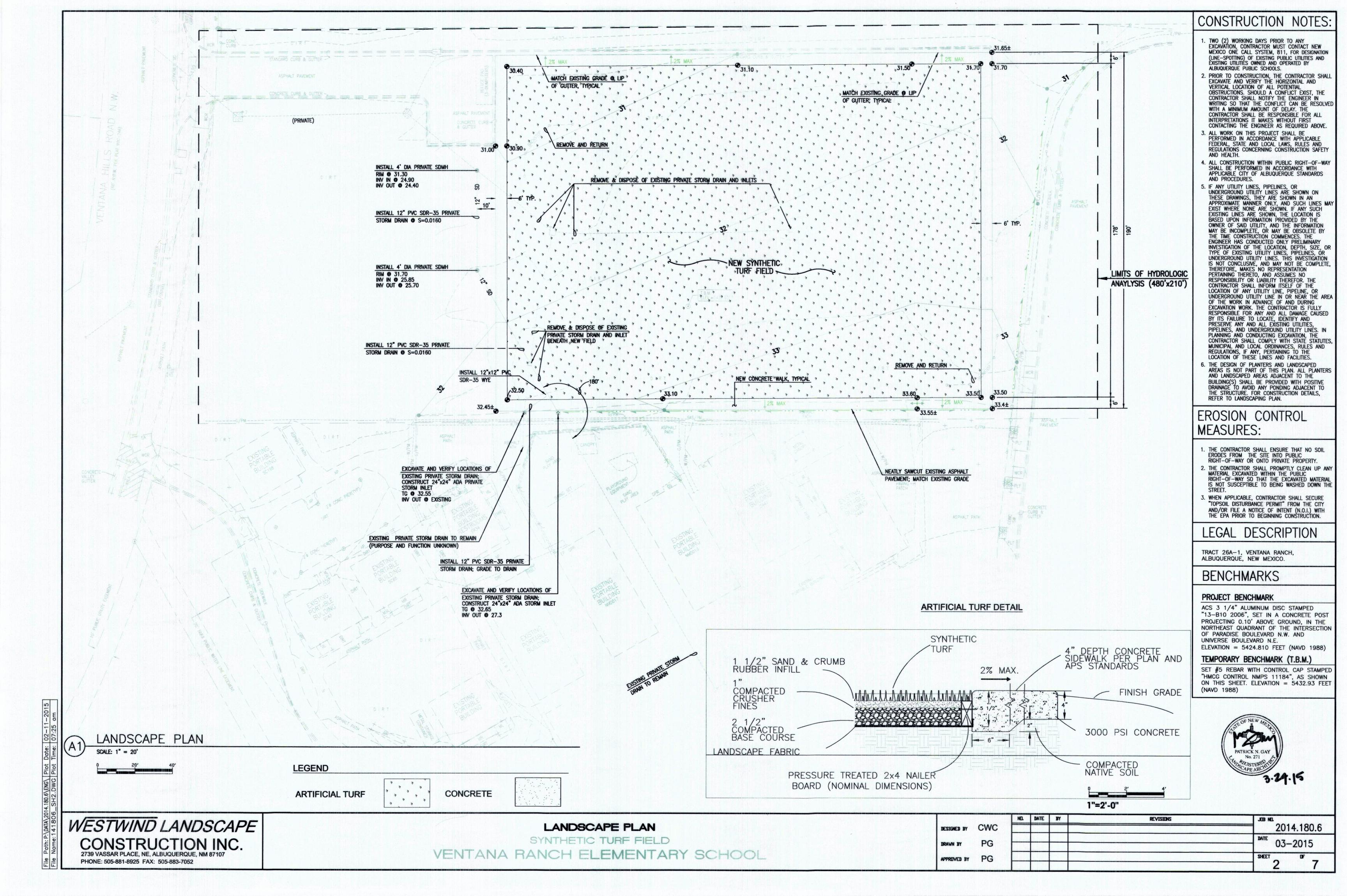
HIGH MESA Consulting Group

6010-B MIDWAY PARK BLVD. NE . ALBUQUERQUE, NEW MEXICO 87109

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SUPPLEMENTAL SITE AND DRAINAGE INFORMATION SYNTHETIC TURF FIELD VENTANA RANCH ELEMENTARY SCHOOL

JOB NO. 2014.180.6 REVISIONS __J.G.M. DESIGNED BY 04-2015 <u>S.C.C.</u> APPROVED BY



ALBUOUEROUE.

II. PROJECT DESCRIPTION

III. BACKGROUND DOCUMENTS

I. INTRODUCTION AND EXECUTIVE SUMMARY

OUALITY ASSOCIATED WITH THIS PORTION OF THE SITE.

TO DRAIN TO A DESIGNATED FLOOD HAZARD ZONE

DEPICTED BY THIS SUBMITTAL.

IV. EXISTING CONDITIONS

THE PREPARATION OF THIS PLAN RELIED UPON THE FOLLOWING DOCUMENTS:

THIS LEFT THIS EASTERLY PORTION OF THE SCHOOL SITE PRIMARILY BARE SOIL.

DISCHARGING INTO THE PUBLIC STORM DRAIN WITHIN VENTANA HILLS ROAD NW.

THIS PROJECT, LOCATED IN THE VENTANA RANCH AREA OF THE NORTHWEST MESA OF THE ALBUQUERQUE METROPOLITAN AREA, REPRESENTS A MODIFICATION TO AN EXISTING APS ELEMENTARY SCHOOL SITE WITHIN

AN INFILL AREA. THE PROPOSED CONSTRUCTION CONSISTS OF THE DEVELOPMENT OF A SYNTHETIC TURF

PLAY FIELD IN A PORTION OF THE SITE THAT PREVIOUSLY SUPPORTED A PORTABLE CLASSROOM CAMPUS

CONSTRUCTED IN ADVANCE OF PERMANENT CLASSROOM BUILDINGS. THE DRAINAGE CONCEPT WILL BE THE

CONTINUED FREE DISCHARGE OF DEVELOPED RUNOFF FROM THE SITE TO THE ADJACENT PUBLIC STORM

DRAIN SYSTEM IN ACCORDANCE WITH THE MASTER DRAINAGE PLAN (B09/D3H1) PREPARED AND APPROVED IN

ADVANCE OF SITE DEVELOPMENT. THE PROPOSED FIELD IS A LESS INTENSE FORM OF DEVELOPMENT THAN

THE ORIGINALLY APPROVED PORTABLE CLASSROOM CAMPUS AND AS SUCH WILL GENERATE LESS RUNOFF

THAN THE SITE WAS ORIGINALLY PLANNED FOR. IN ADDITION, THE USE OF SYNTHETIC TURF, A PERMEABLE

LAND TREATMENT, WILL CAPTURE AND TREAT THE FIRST FLUSH, THEREBY MITIGATING STORM WATER

AS SHOWN BY THE VICINITY MAP, THE PROPOSED PROJECT SITE IS LOCATED AT THE NORTHEAST CORNER OF

SCHOOL SITE THAT IS LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF RAINBOW BLVD. NW

AND VENTANA VILLAGE ROAD NW. AS SHOWN BY PANELS 103 OF 825 OF THE NATIONAL FLOOD INSURANCE

PROGRAM FLOOD INSURANCE RATE MAPS PUBLISHED BY FEMA FOR BERNALILLO COUNTY, NEW MEXICO,

AUGUST 16, 2012, THIS SITE DOES NOT LIE WITHIN A DESIGNATED FLOOD HAZARD ZONE NOR DOES IT APPEAR

VENTANA RANCH MASTER DRAINAGE PLAN PREPARED BY HIGH MESA CONSULTING GROUP (FORMERLY)

JEFF MORTENSEN & ASSOCIATES, INC.), NMPE 8547, DATED 03-18-2004 AND REVISED 06-15-2004. THE

MASTER DRAINAGE PLAN (MDP) ESTABLISHED THE FULL-BUILD-OUT CONDITION FOR THE SITE WITH

FREE DISCHARGE TO THE ADJACENT PUBLIC STORM DRAIN IN VENTANA HILLS ROAD NW. THE MDP ALSO

• FREE DISCHARGE TO THE ADJACENT PUBLIC STORM DRAIN IN VENTANA HILLS ROAD NW. THE MDP ALSO

DEMONSTRATES THE INTENSE LEVEL OF DEVELOPMENT FOR WHICH THE SITE WAS ORIGINALLY

PLANNED IN THE PROXIMITY OF THE NEW SYNTHETIC TURF FIELD. THE MDP ALSO RECOGNIZED THAT

THE SITE IS CHARACTERIZED BY TWO DRAINAGE BASINS - E AND W. THE PROJECT SITE LIES WITHIN

HIGH MESA CONSULTING GROUP (FORMERLY JEFF MORTENSEN & ASSOCIATES, INC.), NMPE 8547 DATED

01-24-2005 AND CERTIFIED FOR CERTIFICATE OF OCCUPANCY 12-07-2006 (TEMP) AND 09-06-2007 (PERM).

TOPOGRAPHIC SURVEY PREPARED BY HIGH MESA CONSULTING GROUP, NMPS 11184, DATED 12-11-2014.

THE PROJECT SITE IS LOCATED AT THE NORTHEAST CORNER OF THE SCHOOL SITE AND PRESENTLY CONSISTS OF A BARE SOIL AREA ONCE OCCUPIED BY A PORTABLE CLASSROOM CAMPUS CONSTRUCTED IN ADVANCE OF

THE PERMANENT CLASSROOM CONSTRUCTION ON THE SITE. ONCE THE PERMANENT CLASSROOM BUILDING WAS CONSTRUCTED AT THE WEST END OF THE SITE, AND OVERCROWDING WAS FURTHHER ADRESSED

ELSEWHERE ON THE NORTHWEST MESA, THE MAJORITY OF THE PORTABLE CLASSROOM BUILDINGS ALONG

WITH ASSOCIATED PAVED WALKWAYS AND SITE IMPROVEMENTS WERE REMOVED FROM THE SCHOOL SITE.

THOSE IMPROVEMENTS THAT REMAINED INCLUDED A SMALL PARKING AREA FRAMED WITH CURB AND

GUTTER AND DRAINED VIA PRIVATE STORM DRAIN, CURB AND GUTTER EDGE TREATMENT THAT COLLECTS

AND DIVERTS UPSTREM ONSITE SHEETFLOW NORTH TO THE AFOREMENTIONED PARKING AREA, A PRIVATE

STORM DRAIN SYSTEM THAT SERVED THE FORMER PORTABLE PARK AND CURRENTLY SERVES UPSTREAM

PORTIONS OF THE SITE, AND A RELATIVELY LARGE BARE SOIL AREA AS PREVIOUSLY DESCRIBED. OVERALL,

THIS PORTION OF THE SCHOOL SITE DRAINS FROM WEST TO EAST WITH RUNOFF COLLECTED BY THE CURB AND

GUTTER EDGE TREATMENT THAT DIVERTS FLOWS NORTH TO THE SMALL PAVED PARKING AREA WHERE

RUNOFF ENTERS THE PRIVATE STORM DRAIN SYSTEM. THE PRIVATE STORM DRAIN SYSTEM DRAINS NORTH.

THERE ARE NO OFFSITE FLOWS IMPACTING THE PROJECT SITE AS THE PROJECT SITE LIES INTERNAL TO THE

EXISTING ELEMENTARY SCHOOL SITE AND IS TOPOGRAPHICALLY LOWER THAN THE UPSTREAM

THE SUBJECT SURVEY PROVIDES THE BASIS FOR THE EXISTING CONDITIONS OF THE PROJECT SITE AS

BUILDINGS WITH ASSOCIATED PAVING, LANDSCAPING AND PLAYGROUND IMPROVEMENTS.

THE PHASE 2 PLAN PROVIDED FOR THE UPSTREAM DEVELOPMENT OF PERMANENT CLASSROOM

• GRADING AND DRAINAGE PLAN FOR VENTANA RANCH ELEMENTARY SCHOOL - PHASE 2 PREPARED BY

THIS SUBMITTAL IS MADE IN SUPPORT OF GRADING AND PAVING PERMITS TO BE ISSUED BY THE CITY OF

CONTRIBUTING PORTIONS OF THE SITE TO THE WEST. THE PROJECT SITE IS ALSO TOPOGRAPHICALLY HIGHER

THE PROPOSED CONSTRUCTION CONSISTS OF APPROXIMATELY ONE ACRE OF SYNTHETIC TURF PLAY FIELD

FRAMED BY A NEW CONCRETE PATH. THE NEW FIELD WILL SHEETFLOW FROM WEST TO EAST WHERE SURFACE

RUNOFF GENERATED BY THE FIELD WILL BE COLLECTED BY THE EXISTING CURB AND GUTTER THAT

PARALLELS THE EAST EDGE OF THE SITE AND DRAINS FROM SOUTH TO NORTH. THE CURB AND GUTTER

DISCHARGES TO THE SMALL PAVED PARKING AREA PREVIOUSLY MENTIONED WHERE IT THEN ENTERS THE

PRIVATE STORM DRAIN SYSTEM VIA EXISTING SINGLE C STORM INLET. IT SHOULD NOTED, HOWEVER, THAT

THE NEW SYNTHETIC TURF IS A PERMEABLE SURFACE THAT WILL GENERATE FAR LESS RUNOFF THAN THE

BARE SOIL FIELD PRESENT TODAY. IN THE DEVELOPED CONDITION, THE MAJORITY OF THE RUNOFF

ASSOCIATED WITH THE NEW FIELD IS EXPECTED TO INFILTRATE WITH LITTLE RUNOFF ACTUALLY REACHING

SURFACE RUNOFF GENERATED UPSTREAM OF THE NEW FIELD WILL BE COLLECTED VIA NEW PRIVATE STORM

INLETS POSITIOED AT LOW-POINTS ALONG THE WEST OF THE FIELD WHERE THE NEW CONCRETE PATH WILL

ABUT EXISTING ASPHALT PAVING. THE NEW INLETS WILL CONNECT DIRECTLY TO THE EXISTING ONSITE

PRIVATE STORM DRAIN SYSTEM ALLOWING THE UPSTREAM FLOWS TO EXIT THE SITE TO THE PUBLIC STORM

DRAIN LOCATED IN VENTANA HILLS ROAD NW. CONCURRENT WITH THE CONSTRUCTION OF THE NEW INLETS

AND THE GRADING OF THE NEW FIELD, PORTIONS OF THE EXISTING STORM DRAIN SYSTEM THAT ONCE SERVED

THE PORTABLE CLASROOM CAMPUS WILL BE REMOVED WITHOUT INTERRUPTING THE CONTINUITY OF FLOW.

A SMALL PORTION OF UPSTREAM FLOW WILL BE DIVERTED SOUTH TO A GRAVEL BUFFER TO BE CONSTRUCTED

ALONG THE SOUTH EDGE OF THE NEW FIELD. THE RELATIVELY SMALL CONTRIBUTION OF RUNOFF IN THIS

AREA WILL BE DISPERSED THROUGH THE GRAVEL MULCH DISSIPATING ITS ENERGY WHILE PROMOTING

THE GRADING PLANS SHOW 1.) EXISTING AND PROPOSED GRADES INDICATED BY SPOT ELEVATIONS AND

IMPROVEMENTS, 3.) INTERIM BMPs, AND 4.) CONTINUITY BETWEEN EXISTING AND PROPOSED GRADES. AS

SHEETFLOW FROM WEST TO EAST WITH RUNOFF BEING COLLECTED IN THE GUTTER OF THE EXISTING CURB

AND GUTTER THAT LIES ALONG THE EAST EDGE OF THE PROJECT. FROM THIS POINT, RUNOFF FLOWS NORTH

WITHIN THE GUTTER SECTION TO AN EXISTING PARKING AREA WHERE RUNOFF IS COLLECTED BY A PRIVATE

THIS PROJECT WILL DISTURB GREATER THAN ONE-ACRE OF LAND. A SEPARATE STORM WATER POLLUTION

PREVENTION PLAN (SWPPP) WILL BE PREPARED. IN SUPPORT OF THE SWPPP AND THE PROPOSED

THE CALCULATIONS CONTAINED HEREON ANALYZE THE EXISTING AND DEVELOPED 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. AS DEMONSTRATED BY THESE CALCULATIONS, THE PROPOSED PROJECT WILL

RESULT IN A SLIGHT DECREASE IN THE DEVELOPED RUNOFF GENERATED BY THE SITE. THIS IS FURTHER

ENHANCED BY THE SYNTHETIC TURF FIELD STRUCTURE THAT IS QUITE PERMEABLE ALTHOUGH CREDIT IS NOT

THE FOLLOWING CONCLUSIONS HAVE BEEN ESTABLISHED AS A RESULT OF THE EVALUATIONS CONTAINED

THE PROPOSED IMPROVEMENTS WILL MAINTAIN AND NOT ALTER THE EXISTING DRAINAGE PATTERNS

THE PROPOSED IMPROVEMENTS WILL RESULT IN A SLIGHT DECREASE IN THE DEVELOPED RUNOFF

THE PROPOSED IMPROVEMENTS WILL NOT ADVERSELY IMPACT DOWNSTREAM PROPERTIES OR

CONSTRUCTION, THIS PROJECT REQUIRES THE PREPARATION OF A SITE SPECIFIC EROSION CONTROL PLAN.

SHOWN BY THIS PLAN, THE PROPOSED GRADING WILL MAINTAIN THE CURRENT DRAINAGE PATTERN OF

AS IN THE EXISTING CONDITION, THERE ARE NO OFFSITE FLOWS IMPACTING THE PROJECT SITE.

CONTOURS AT 1'-0" INTERVALS, 2.) THE LIMIT AND CHARACTER OF THE EXISTING AND PROPOSED

STORM INLET THAT DISCHARGES TO THE PUBLIC STORM DRAIN IN VENTANA HILLS ROAD NW.

BEING TAKEN FOR THE PERMEABLE NATURE OF THE SYNTHETIC TURF MATRIX.

OF THE EASTERLY PORTION (BASIN E) OF THE ELEMENTARY SCHOOL CAMPUS

5. THIS PROJECT REQUIRES A SEPARATE EROSION AND SEDIMENT CONTROL PLAN

THAN THE OFFSITE ADJACENT LAND TO THE IMMEDIATE NORTH AND EAST.

V. DEVELOPED CONDITIONS

THE EAST EDGE CURB AND GUTTER.

VII. EROSION CONTROL PLAN

GENERATED BY THE SITE

DOWNSTREAM DRAINAGE CONDITIONS

THIS PROJECT IS SUBJECT TO AN EPA NPDES PERMIT

2.20

100,800 SF

2.31 AC

AREA (SF/AC)

AREA (SF/AC)

86,200 / 2.00

14,600 / 0.30

47,900 / 1.10

30,500 / 0.70

1.12 IN

7.1 CFS

1.06 IN

6.5 CFS

(DECREASE)

(DECREASE)

-0.6 CFS

9,350 CF

22,400 / 0.51

(0.44*0.00) + (0.67*0.00) + (0.99*2.00) + (1.97*0.30)/2.30 =

(0.44*0.00) + (0.67*1.10) + (0.99*0.70) + (1.97*0.51)/2.31 =

 $Q_P = Q_{100} = (1.29 * 0.00) + (2.03 * 0.00) + (2.87 * 2.00) + (4.37 * 0.30) =$

 $Q_P = Q_{100} = (1.29*0.00) + (2.03*1.10) + (2.87*0.70) + (4.37*0.51) =$

SITE CHARACTERISTICS

B. P_{100, 6 HR} = P₃₆₀ =

D. LAND TREATMENTS

II. HYDROLOGY

A. EXISTING CONDITION

VOLUME

A. PRECIPITATION ZONE

C. TOTAL PROJECT AREA (A_T) =

1. EXISTING LAND TREATMENT

2. DEVELOPED LAND TREATMENT

 $E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$

 $Q_P = Q_{PA}A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$

 $E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$

 $V_{100, 6 HR} = (E_W/12)A_T = (1.06/12)2.31 =$

 $Q_{P} = Q_{PA}A_{A} + Q_{PB}A_{B} + Q_{PC}A_{C} + Q_{PD}A_{D}$

 $\Delta V_{100, 6 HR} = 8,900 - 9,350 =$

 $V_{100.6 \text{ HR}} = (E_W/12)A_T =$

2. PEAK DISCHARGE

B. DEVELOPED CONDITION

2. PEAK DISCHARGE

VOLUME

C. COMPARISON

VOLUME

2. PEAK DISCHARGE

TREATMENT

TREATMENT

HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING SO THAT CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INTERPRETATIONS IT MAKES WITHOUT FIRST CONTACTING THE ENGINEER AS REQUIRED ABOVE.

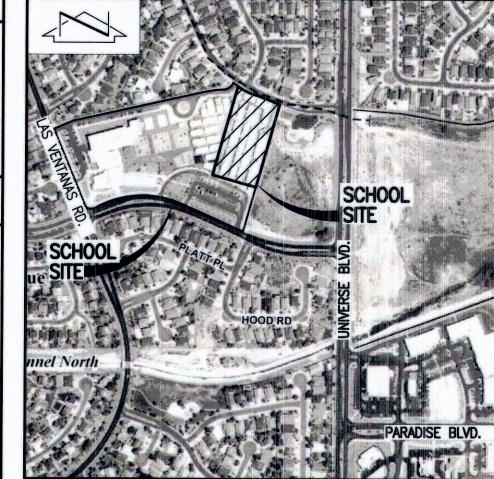
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VICINITY MAP

SCALE: 1" = 750'



F.I.R.M.

SCALE: 1" = 500'

DATE 08-16-2012

LEGAL DESCRIPTION

TRACT 26A-1, VENTANA RANCH, ALBUQUERQUE, NEW

BENCHMARKS

PROJECT BENCHMARK

ACS 3 1/4" ALUMINUM DISC STAMPED "13-B10 2006". SET IN A CONCRETE POST PROJECTING 0.10' ABOVE GROUND, IN THE NORTHEAST QUADRANT OF THE INTERSECTION OF PARADISE BOULEVARD N.W. AND UNIVERSE BOULEVARD N.E. ELEVATION = 5424.810 FEET (NAVD 1988)

TEMPORARY BENCHMARK (T.B.M.)

SET #5 REBAR WITH CONTROL CAP STAMPED "HMCG CONTROL NMPS 11184", AS SHOWN ON SHEET 2. ELEVATION = 5432.93 FEET (NAVD 1988)

EROSION CONTROL MEASURES:

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

. WHEN APPLICABLE, CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" FROM THI CITY AND/OR FILE A NOTICE OF INTENT (N.O.I.) WITH THE EPA PRIOR TO BEGINNING

LEGEND							
AP C CLCLC CCLC CCLC CCLC CCCC CCCC CCCC	ASPHALT PATH COMMUNICATION LINE CENTERLINE CENTERLINE OF DOOR CHAIN LINK FENCE CHAIN LINK GATE SANITARY SEWER CLEANOUT CONCRETE CONCRETE TRASH CAN DOUBLE DOUBLE SANITARY SEWER CLEANOUT ELECTRIC LINE BY PAINT MARI EDGE OF ASPHALT ELECTRIC CONDUIT ELECTRIC PANEL ELECTRIC PANEL ELECTRIC PANELS ATTACHED TO METAL RACK ELECTRIC TRANSFORMER ON CONCRETE PAD FIRE HYDRANT ON CONCRETE FLOWLINE FENCE OPENING GAS LINE BY PAINT MARK GAS LINE SERVICE GAS METER GAS PRESSURE REGULATOR GAS SERVICE FROM UNDERGROUND GUY WIRE ANCHOR INVERT ELEVATION METER CAN METER CAN WITH LINE METER CAN WITH VALVE MANHOLE METAL LANDING METAL LIGHT POLE WITH CONCRETE BASE METAL LANDING METAL LIGHT POLE WITH CONCRETE BASE METAL SIGN METAL SIGN METAL STEPS WITH LANDING OVERHEAD COMMUNICATION LINE (# OF LINES) OVERHEAD ELECTRIC LINE (# OF LINES)		PROPOSED STORM DRAIN PROPOSED INFILTRATION PIT PROPOSED STORM INLET PROPOSED STORM DRAIN MANHOLE EXISTING STORM DRAIN MANHOLE EXISTING FIRE HYDRANT PROPOSED FIRE HYDRANT PROPOSED FIRE HYDRANT FIRE DEPARTMENT CONNECTION EXISTING SANITARY SEWER MANHOLE SANITARY SEWER MANHOLE EXISTING VALVE BOX PROPOSED VALVE BOX PROPOSED VALVE BOX EXISTING DOUBLE CLEANOUT PROPOSED DOUBLE CLEANOUT PROPOSED SINGLE CLEANOUT EXISTING WATER SERVICE PROPOSED WATER SERVICE EXISTING WATER LINE PROPOSED WATER LINE EXISTING SANITARY SEWER LINE PROPOSED SANITARY SEWER LINE EXISTING FIRE LINE EXISTING FIRE LINE EXISTING POST INDICATOR VALVE INVERT TOP OF ASPHALT PAVEMENT TOP OF CURB TOP OF GRATE EXISTING SPOT ELEVATION PROPOSED FLOWLINE PROPOSED FLOWLINE PROPOSED CONTOUR EXISTING DIRECTION OF FLOW PROPOSED DIRECTION OF FLOW				
RCP SAS	REINFORCED CONCRETE PIPE SANITARY SEWER	<u> </u>	PUBLIC EASEMENT LINE				
SAS/PM	SANITARY SEWER LINE BY PAINT MARK		HIGH POINT / DIVIDE				
SD/PM SDP SW	STORM DRAIN STORM DRAIN BY PAINT MARK SERVICE DROP POLE		PROPOSED CONCRETE				
/PM	SIDEWALK TELEPHONE LINE BY PAINT MARK	Agrico de Santonia de la Carte de Carte	PROPOSED ASPHALT PAVING				
Ά	TOP OF ASPHALT						

* PAINTED UTILITY LINE

TOP OF CURB TCO TEMP TOP OF CONCRETE TEMPORARY TOP OF GRATE TRAFFIC SIGN TYPICAL VALLEY GUTTER WATER LINE BY PAINT MARK CONCRETE WHEELCHAIR RAMP WATER LINE WATER METER BOX WOOD STEPS WITH LANDING WATER VALVE BOX X-WALK PAINTED CROSSWALK DECIDUOUS TREE SHRUB

MESA CONSULTING GROUP, NMPS NO. 11184, DATED 12/11/2014 (2014.180.5).

HIGH MESA Consulting Group

6010-B MIDWAY PARK BLVD. NE . ALBUQUERQUE, NEW MEXICO 87109 PHONE: 505.345.4250 • FAX: 505.345.4254 • www.highmesgcg.com

DRAINAGE PLAN AND CALCULATIONS SYNTHETIC TURF FIELD VENTANA RANCH ELEMENTARY SCHOOL

NO. DATE BY REVISIONS 2014.180.6 02-2015 ___J.Y.R./S.C.C DRAWN BY APPROVED BY J.G.M.

THIS IS NOT A BOUNDARY SURVEY; DATA IS SHOWN FOR ORIENTATION ONLY. THI BOUNDARY INFORMATION DEPICTED BY THIS PLAN IS BASED UPON AN BOUNDARY SURVEY PREPARED BY HIGH MESA CONSULTING GROUP, NMPS 11184, DATED 12/11/2014 (2014.180.5). THE TOPOGRAPHIC INFORMATION DEPICTED HEREON ! BASED UPON THE PARTIAL TOPOGRAPHIC AND UTILITY SURVEY PREPARED BY HIGH

CITY OF ALBUQUERQUE

ALB U

April 28, 2015

Jeffrey Mortensen, P.E. High Mesa Consulting Group 6010-B Midway Park Blvd NE Albuquerque, NM 87109

Re: Ventana Ranch ES, Synthetic Turf Field Erosion and Sediment Control Plan

Engineer's Stamp Date 4-8-15 (B09E003H1)

Dear Mr. Mortensen,

Based upon the information provided in your submittal received 4-9-15 the above referenced plan is approved to be included in the SWPPP and for Grading Permit once the grading plan is approved by Hydrology.

Cente a chen

If you have any questions, you can contact me at 924-3420.

PO Box 1293

Sincerely,

Albuquerque Curtis Cherne, P.E.

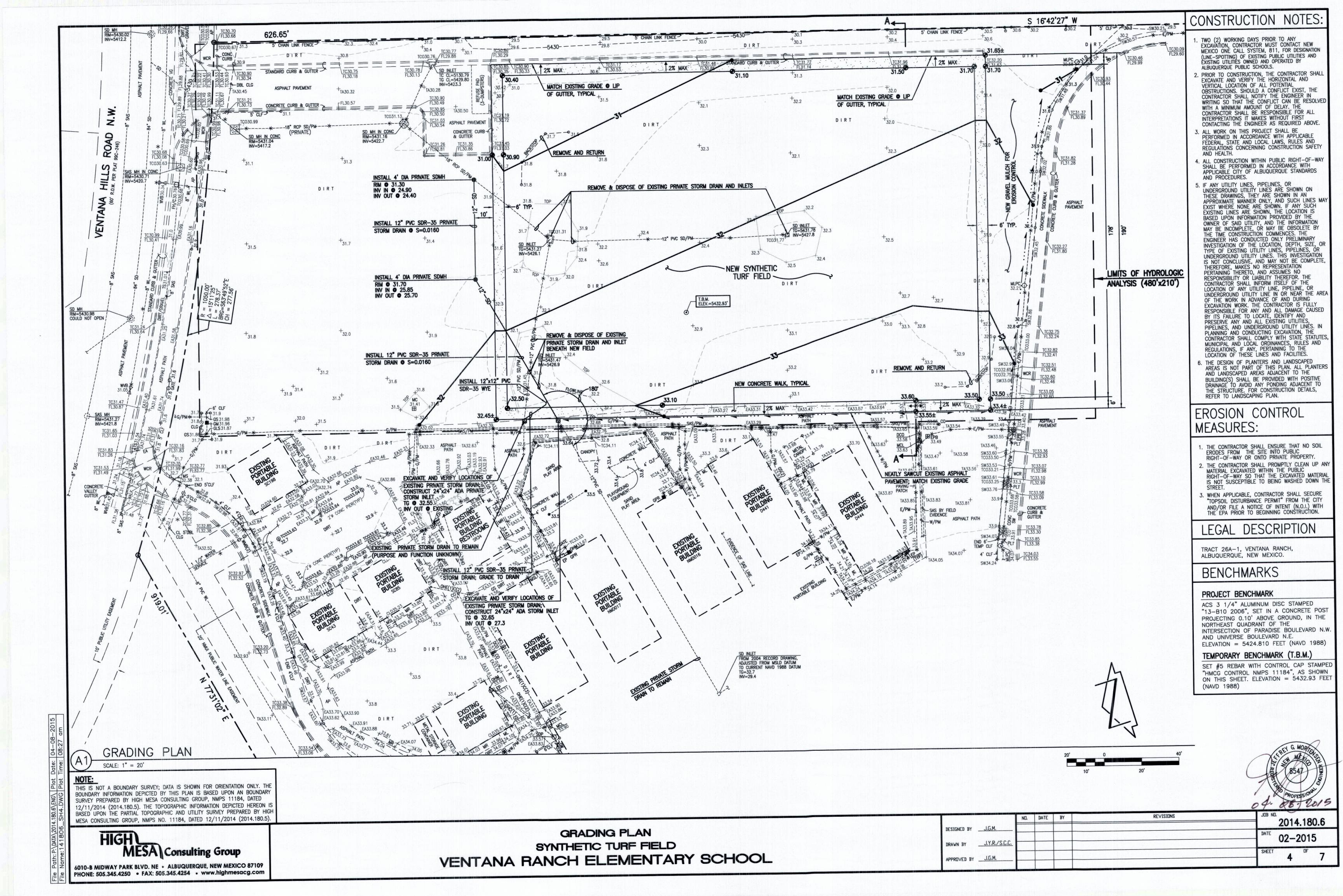
Principal Engineer, Stormwater Quality

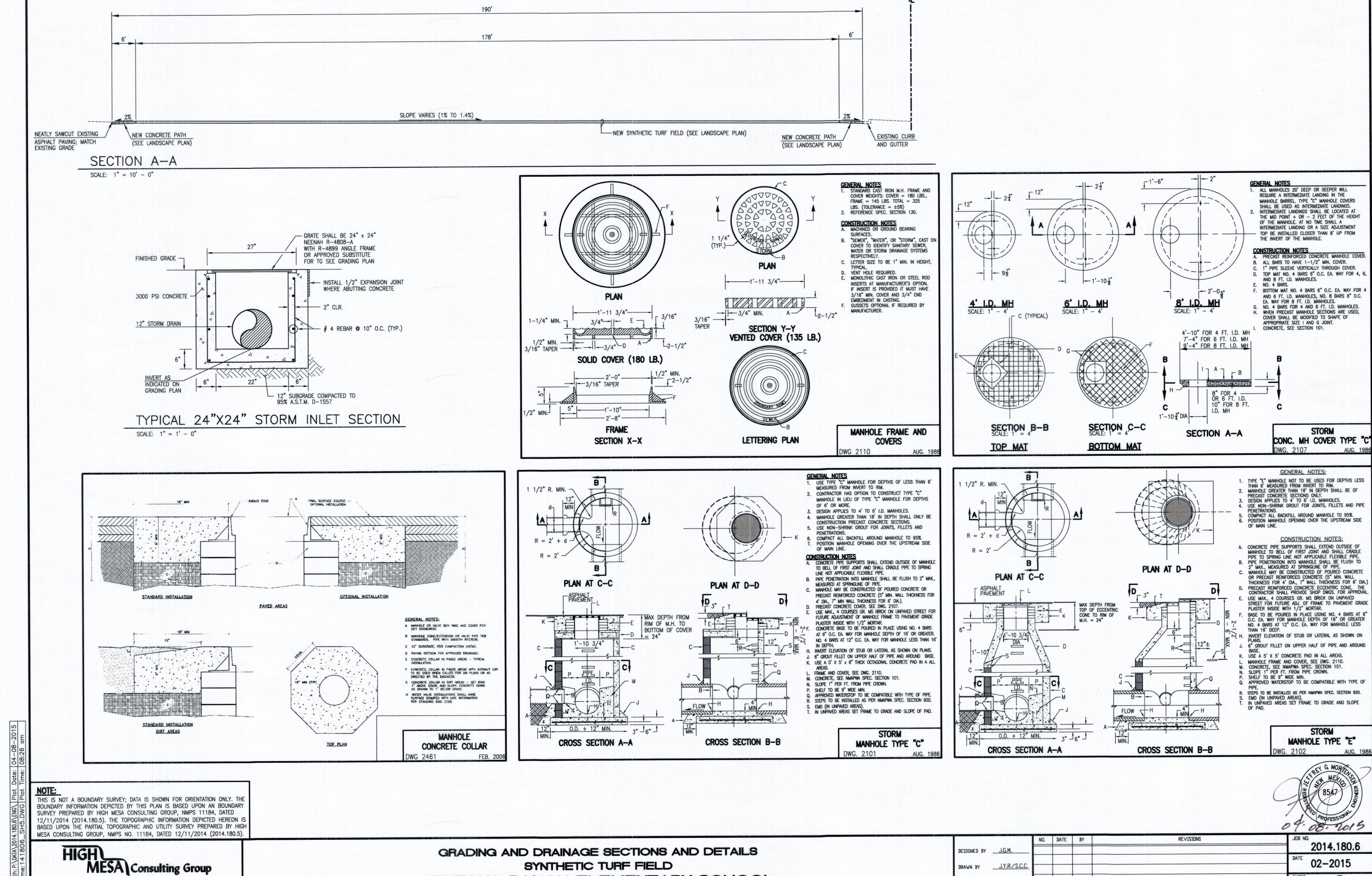
Planning Dept.

NM 87103

www.cabq.gov

C: email

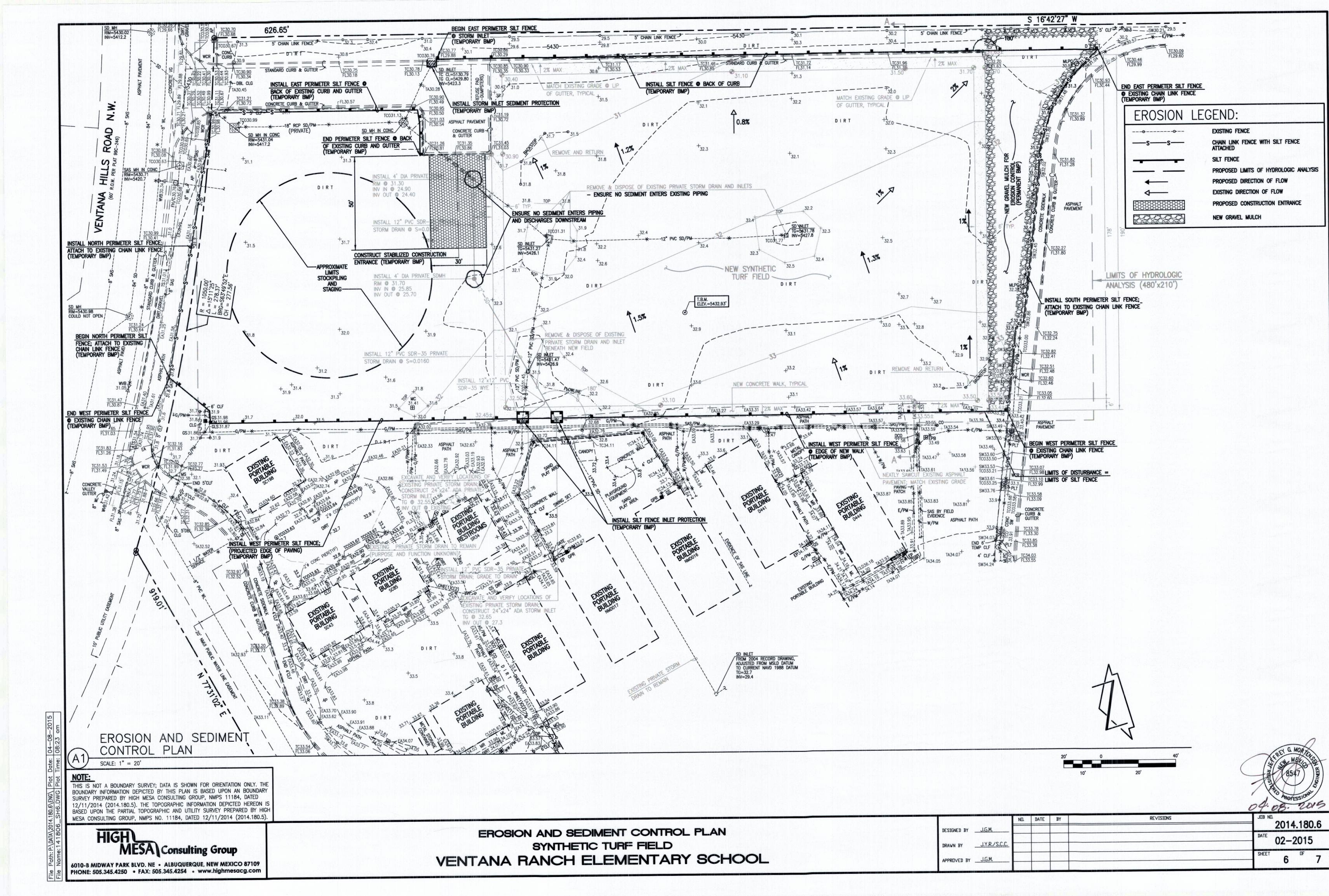


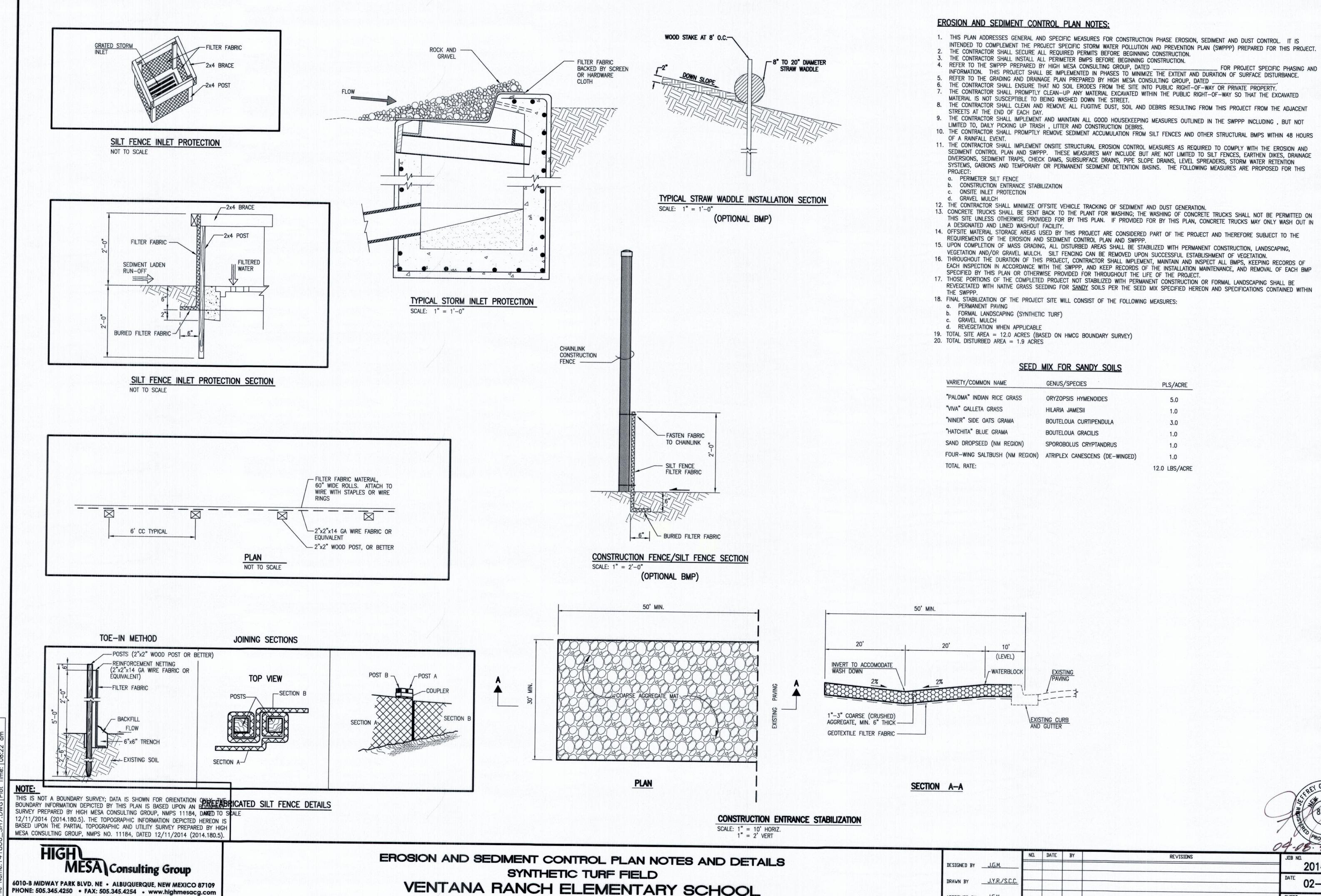


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