

CITY OF ALBUQUERQUE



January 6, 2016

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

Re: Ventana Ranch Elementary Synthetic Turf
6801 Ventana Village Rd NW
Engineer's Stamp dated: 3/24/2015 (B09D003H1)
Certification dated: 12-30-15

Dear Mr. Mortensen,

Based on the Certification received 1/4/2016, the site is acceptable for release of Certificate of Occupancy by Hydrology.

PO Box 1293

If you have any questions, you can contact me at 924-3986 or Totten Elliott at 924-3982.

Albuquerque

Sincerely,

New Mexico 87103

Abiel Carrillo, P.E.,
Principal Engineer, Planning Department
Development and Review Services

www.cabq.gov

TE/AC
C: CO Clerk, Cordova, Camille C.; Miranda, Rachel; Sandoval, Darlene M.; Gary Barreras; Lois Blocker
email

CONSTRUCTION NOTES:

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.
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 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.

LEGAL DESCRIPTION

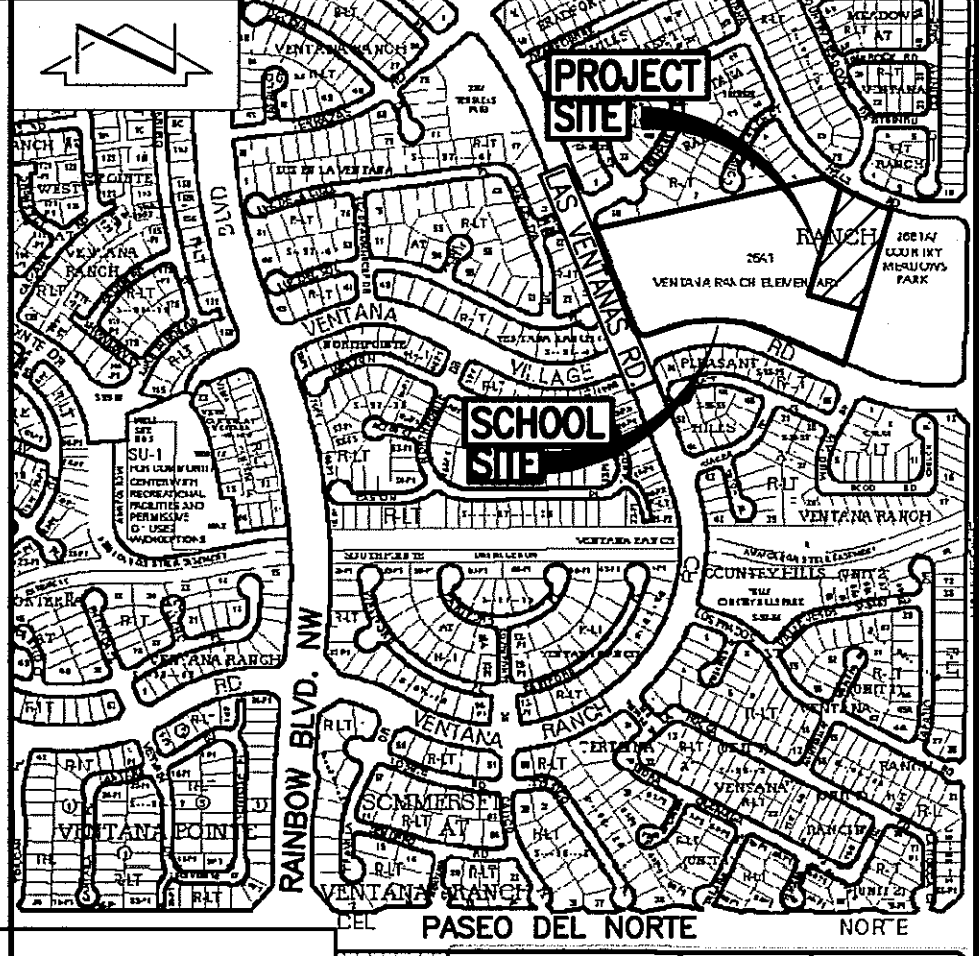
TRACT 26A-1, VENTANA RANCH, ALBUQUERQUE, NEW MEXICO.

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.

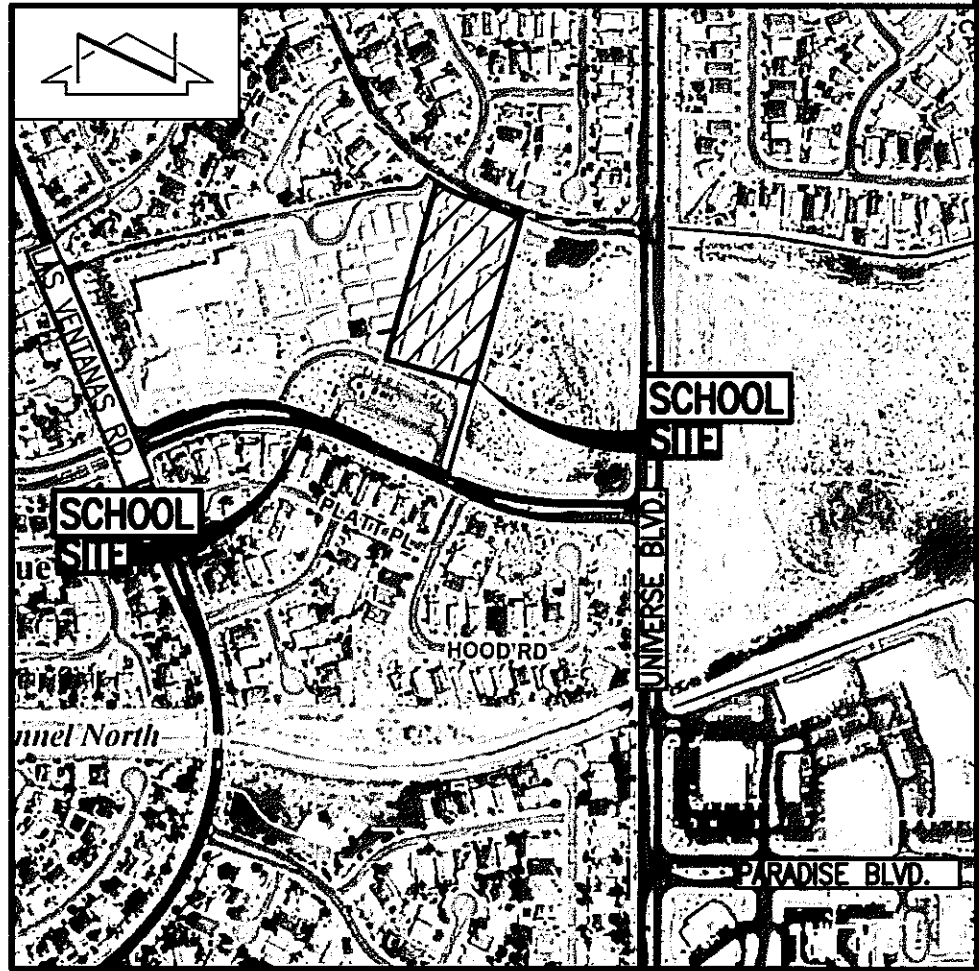
SET #5 REBAR WITH CONTROL CAP STAMPED "HMC CONTROL NMPS 11184", AS SHOWN ON SHEET 2.
ELEVATION = 5432.93 FEET (NAVD 1988)



VICINITY MAP

B-9

SCALE: 1" = 750'



F.I.R.M.

PANEL 103

SCALE: 1" = 500'

OF 825

DATE 08-16-2012

INDEX OF DRAWINGS

SHEET	DESCRIPTION
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7 OF 7	EROSION AND SEDIMENT CONTROL NOTES AND DETAILS



RECORD DRAWING
FOR CERTIFICATION, SEE SHEET 3



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 DRAINAGE INFORMATION
SYNTHETIC TURF FIELD

VENTANA RANCH ELEMENTARY SCHOOL

DESIGNED BY J.G.M.

DRAWN BY S.C.C.

APPROVED BY J.G.M.

NOL

DATE

BY

12/15

JGM

REVISIONS

RECORD DRAWING AND DRAINAGE CERTIFICATION

JOB NO.

2014.180.6

DATE

04-2015

SHEET

1

OF

1

File Path: R:\DATA\2014\180\3\EN\3 Plot Date: 02-11-2015
File Name: 141806_SH2.DWG Plot Time: 07:25 am

A1

LANDSCAPE PLAN

SCALE: 1" = 20'

0

20'

40'

LEGEND

ARTIFICIAL TURF

CONCRETE

WESTWIND LANDSCAPE

CONSTRUCTION INC.

2739 VASSAR PLACE, NE, ALBUQUERQUE, NM 87107

PHONE: 505-881-8925 FAX: 505-883-7052

LANDSCAPE PLAN

SYNTHETIC TURF FIELD

VENTANA RANCH ELEMENTARY SCHOOL

ARTIFICIAL TURF DETAIL

1 1/2" SAND & CRUMB RUBBER INFILL

1" COMPACTED CRUSHER FINES

2 1/2" COMPACTED BASE COURSE

LANDSCAPE FABRIC

SYNTHETIC TURF

2% MAX.

4" DEPTH CONCRETE SIDEWALK PER PLAN AND APS STANDARDS

FINISH GRADE

3000 PSI CONCRETE

COMPACTED NATIVE SOIL

PRESSURE TREATED 2x4 NAILER BOARD (NOMINAL DIMENSIONS)

1"=2'-0"

RECORD DRAWING

- CONSTRUCTION NOTES:
1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM, 811, FOR DESIGNATION (LINE-SPOTTING) OF EXISTING PUBLIC UTILITIES AND EXISTING UTILITIES OWNED AND OPERATED BY ALBUQUERQUE PUBLIC SCHOOLS.

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.

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6. THE DESIGN OF PLANTERS AND LANDSCAPED AREAS IS NOT PART OF THIS PLAN. ALL PLANTERS AND LANDSCAPED AREAS ADJACENT TO THE BUILDING(S) SHALL BE PROVIDED WITH POSITIVE DRAINAGE TO AVOID ANY PONDING ADJACENT TO THE STRUCTURE. FOR CONSTRUCTION DETAILS, REFER TO LANDSCAPING PLAN.

- EROSION CONTROL MEASURES:
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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.

LEGAL DESCRIPTION

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

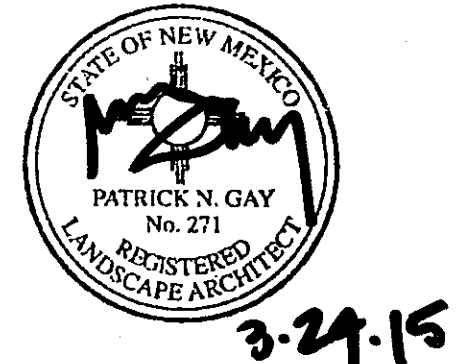
BENCHMARKS

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 "HMCQ CONTROL NMPS 11184", AS SHOWN ON THIS SHEET. ELEVATION = 5432.93 FEET (NAVD 1988)



DESIGNED BY	CWC	NL	DATE	BY	REVISIONS	JOB NO.
DRAWN BY	PG	3	11/15	J.G.M.	RECORD DRAWING	2014.180.6
						DATE 03-2015
APPROVED BY	PG					SHEET 2 OF 7

DRAINAGE PLAN

I. INTRODUCTION AND EXECUTIVE SUMMARY

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 (009/03H) 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 QUALITY ASSOCIATED WITH THIS PORTION OF THE SITE.

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

II. PROJECT DESCRIPTION

AS SHOWN BY THE VICINITY MAP, THE PROPOSED PROJECT SITE IS LOCATED AT THE NORTHEAST CORNER OF SCHOOL SITE THAT IS LOCATED AT 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 TO DRAIN TO A DESIGNATED FLOOD HAZARD ZONE.

III. BACKGROUND DOCUMENTS

THE PREPARATION OF THIS PLAN RELIED UPON THE FOLLOWING DOCUMENTS:

- 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 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 BASIN E AS DEFINED BY THE MDP.
- GRADING AND DRAINAGE PLAN FOR VENTANA RANCH ELEMENTARY SCHOOL - PHASE 2 PREPARED BY HIGH MESA CONSULTING GROUP (FORMERLY JEFF MORTENSEN & ASSOCIATES, INC.), NMPE 8547 DATED 01-24-2008 AND CERTIFIED FOR CERTIFICATE OF OCCUPANCY 12-07-2006 (TEMP) AND 09-06-2007 (PERM). THE PHASE 2 PLAN PROVIDED FOR THE UPSTREAM DEVELOPMENT OF PERMANENT CLASSROOM BUILDINGS WITH ASSOCIATED PAVING, LANDSCAPING AND PLAYGROUND IMPROVEMENTS.
- TOPOGRAPHIC SURVEY PREPARED BY HIGH MESA CONSULTING GROUP, NMPS 11184, DATED 12-11-2014. THE SUBJECT SURVEY PROVIDES THE BASIS FOR THE EXISTING CONDITIONS OF THE PROJECT SITE AS DEPICTED BY THIS SUBMITTAL.

IV. EXISTING CONDITIONS

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

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

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

CONTRIBUTING PORTIONS OF THE SITE TO THE WEST. THE PROJECT SITE IS ALSO TOPOGRAPHICALLY HIGHER THAN THE OFFSITE ADJACENT LAND TO THE IMMEDIATE NORTH AND EAST.

V. DEVELOPED CONDITIONS

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 THE EAST EDGE CURB AND GUTTER.

SURFACE RUNOFF GENERATED UPSTREAM OF THE NEW FIELD WILL BE COLLECTED VIA NEW PRIVATE STORM INLETS POSITIONED 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 CLASSROOM 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 INFILTRATION.

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

VI. GRADING PLAN

THE GRADING PLANS SHOW 1.) EXISTING AND PROPOSED GRADES INDICATED BY SPOT ELEVATIONS AND CONTOURS AT 1'-0" INTERVALS, 2.) THE LIMIT AND CHARACTER OF THE EXISTING AND PROPOSED IMPROVEMENTS, 3.) INTERIM BMPs, AND 4.) CONTINUITY BETWEEN EXISTING AND PROPOSED GRADES. AS SHOWN BY THIS PLAN, THE PROPOSED GRADING WILL MAINTAIN THE CURRENT DRAINAGE PATTERN OF 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 STORM INLET THAT DISCHARGES TO THE PUBLIC STORM DRAIN IN VENTANA HILLS ROAD NW.

VII. EROSION CONTROL PLAN

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

VIII. CALCULATIONS

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

IX. CONCLUSIONS

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

- THE PROPOSED IMPROVEMENTS WILL MAINTAIN AND NOT ALTER THE EXISTING DRAINAGE PATTERNS OF THE EASTERLY PORTION (BASIN E) OF THE ELEMENTARY SCHOOL CAMPUS
- THE PROPOSED IMPROVEMENTS WILL RESULT IN A SLIGHT DECREASE IN THE DEVELOPED RUNOFF GENERATED BY THE SITE
- THE PROPOSED IMPROVEMENTS WILL NOT ADVERSELY IMPACT DOWNSTREAM PROPERTIES OR DOWNSTREAM DRAINAGE CONDITIONS
- THIS PROJECT IS SUBJECT TO AN EPA NPDES PERMIT
- THIS PROJECT REQUIRES A SEPARATE EROSION AND SEDIMENT CONTROL PLAN

CALCULATIONS

I. SITE CHARACTERISTICS

A. PRECIPITATION ZONE = 1

B. $P_{100, 6 \text{ HR}} = P_{360} = 2.20$

C. TOTAL PROJECT AREA (A_T) = 100,800 SF
2.31 AC

D. LAND TREATMENTS

1. EXISTING LAND TREATMENT

TREATMENT	AREA (SF/AC)	%
A		
B		
C	86,200 / 2.00	87
D	14,600 / 0.30	13

2. DEVELOPED LAND TREATMENT

TREATMENT	AREA (SF/AC)	%
A		
B	47,900 / 1.10	48
C	30,500 / 0.70	30
D	22,400 / 0.51	22

II. HYDROLOGY

A. EXISTING CONDITION

1. VOLUME
 $E_w = (E_p A_A + E_p A_B + E_p A_C + E_p A_D) / A_T$
 $E_w = (0.44 * 0.00) + (0.67 * 0.00) + (0.99 * 2.00) + (1.97 * 0.30) / 2.30 = 1.12 \text{ IN}$
 $V_{100, 6 \text{ HR}} = (E_w / 12) A_T = (1.12 / 12) 2.30 = 0.2147 \text{ AC-FT} = 9,350 \text{ CF}$

2. PEAK DISCHARGE
 $Q_p = Q_{pA} A_A + Q_{pB} A_B + Q_{pC} A_C + Q_{pD} A_D$
 $Q_p = Q_{100} = (1.29 * 0.00) + (2.03 * 0.00) + (2.87 * 2.00) + (4.37 * 0.30) = 7.1 \text{ CFS}$

B. DEVELOPED CONDITION

1. VOLUME
 $E_w = (E_p A_A + E_p A_B + E_p A_C + E_p A_D) / A_T$
 $E_w = (0.44 * 0.00) + (0.67 * 1.10) + (0.99 * 0.70) + (1.97 * 0.51) / 2.31 = 1.06 \text{ IN}$
 $V_{100, 6 \text{ HR}} = (E_w / 12) A_T = (1.06 / 12) 2.31 = 0.2044 \text{ AC-FT} = 8,900 \text{ CF}$

2. PEAK DISCHARGE
 $Q_p = Q_{pA} A_A + Q_{pB} A_B + Q_{pC} A_C + Q_{pD} A_D$
 $Q_p = Q_{100} = (1.29 * 0.00) + (2.03 * 1.10) + (2.87 * 0.70) + (4.37 * 0.51) = 6.5 \text{ CFS}$

C. COMPARISON

1. VOLUME
 $\Delta V_{100, 6 \text{ HR}} = 8,900 - 9,350 = -450 \text{ CF} \quad (\text{DECREASE})$

2. PEAK DISCHARGE
 $\Delta Q_{100} = 6.5 - 7.1 = -0.6 \text{ CFS} \quad (\text{DECREASE})$



ENGINEER'S DRAINAGE CERTIFICATION FOR PROJECT CLOSEOUT

I, JEFFREY G. MORTENSEN, NMPE 8547, OF THE FIRM HIGH MESA CONSULTING GROUP, HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND DRAINED IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 04-08-2015. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS EITHER BEEN OBTAINED BY ME OR PERSONNEL UNDER MY DIRECT SUPERVISION AS SUPPLEMENTAL SITE DATA COMBINED WITH RECORD INFORMATION OBTAINED FROM THE VERIFICATION SURVEY CONDUCTED 09-16-2015 UNDER THE DIRECT SUPERVISION OF CHARLES G. CALA, JR., NMPS 11184, OF THE FIRM HIGH MESA CONSULTING GROUP, AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THE GRADE OF THE NEW FIELD HAS BEEN VERIFIED BY DOCUMENTING THE ELEVATIONS OF THE FINISHED BASE COURSE PRIOR TO INSTALLATION OF THE SYNTHETIC TURF MATERIAL THAT IS 1-1/2-INCHES IN TOTAL THICKNESS. AS SUCH, THE ELEVATION OF THE FINISHED BASE COURSE HAS BEEN EVALUATED BY ADDING 1-1/2 INCHES (0.125 FEET) TO THE RECORDED BASE COURSE ELEVATION TO ARRIVE AT A PROJECTED FINISHED GRADE THAT WAS THEN COMPARED TO THE AS-APPROVED DESIGN GRADE. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF PROJECT CLOSEOUT.

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. THIS CERTIFICATION DOES NOT ADDRESS ADA COMPLIANCE WHICH IS BEYOND THE SCOPE OF GRADING AND DRAINAGE. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

JEFFREY G. MORTENSEN, NMPE 8547

DATE

12-30-2015



RECORD DRAWING

CONSTRUCTION NOTES:

- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM, 811, FOR DESIGNATION (LINE-SPOTTING) OF EXISTING PUBLIC UTILITIES AND EXISTING UTILITIES OWNED AND OPERATED BY ALBUQUERQUE PUBLIC SCHOOLS.
- 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.
- 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.
- ALL CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.
- 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:

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

LEGEND

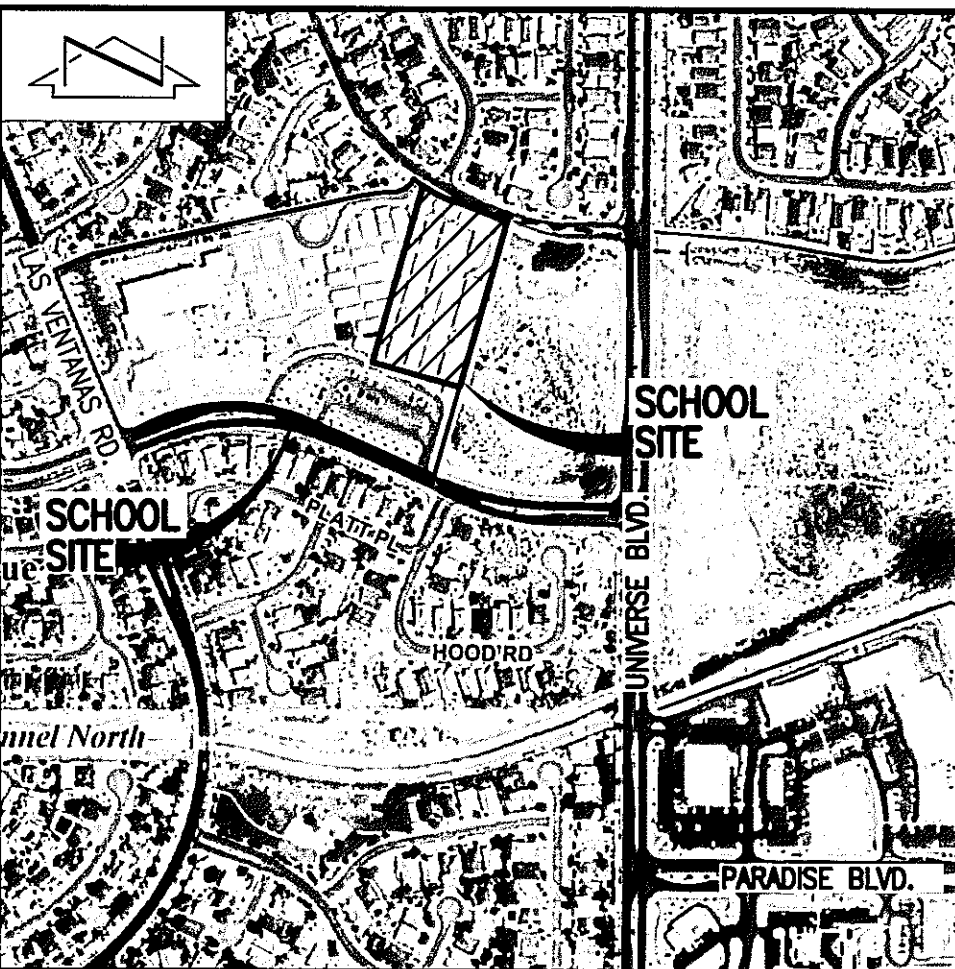
AP	ASPHALT PATH	SD	PROPOSED STORM DRAIN
CL	COMMUNICATION LINE	SD	PROPOSED INFILTRATION PIT
CLD	CENTERLINE	SD	PROPOSED STORM INLET
CLF	CENTERLINE OF DOOR	SD	PROPOSED STORM DRAIN MANHOLE
CLG	CHAIN LINK FENCE	SD	EXISTING STORM DRAIN MANHOLE
CO	SANITARY SEWER CLEANOUT	SD	EXISTING FIRE HYDRANT
CONC	CONCRETE	SD	PROPOSED FIRE HYDRANT
CTC	CONCRETE TRASH CAN	SD	FIRE DEPARTMENT CONNECTION
DBL	DOUBLE	SD	EXISTING SANITARY SEWER MANHOLE
DCO	DOUBLE SANITARY SEWER CLEANOUT	SD	SANITARY SEWER MANHOLE
E/PM	ELECTRIC LINE BY PAINT MARK	SD	EXISTING VALVE BOX
EA	EDGE OF ASPHALT	SD	PROPOSED VALVE BOX
EC	ELECTRIC CONDUIT	SD	EXISTING DOUBLE CLEANOUT
EP	ELECTRIC PANEL	SD	PROPOSED SINGLE CLEANOUT
EP/MRK	ELECTRIC PANELS ATTACHED TO METAL RACK	SD	PROPOSED WATER SERVICE
EPB	ELECTRIC PULLBOX	SD	EXISTING WATER LINE
ET/CP	ELECTRIC TRANSFORMER ON CONCRETE PAD	SD	PROPOSED WATER LINE
FH/C	FIRE HYDRANT ON CONCRETE FLOWLINE	SD	EXISTING SANITARY SEWER LINE
FL	FENCE OPENING	SD	PROPOSED SANITARY SEWER LINE
G/PM	GAS LINE BY PAINT MARK	SD	EXISTING FIRE LINE
GLS	GAS LINE SERVICE	SD	PROPOSED FIRE LINE
GM	GAS METER	SD	EXISTING POST INDICATOR VALVE
GPR	GAS PRESSURE REGULATOR	SD	PROPOSED POST INDICATOR VALVE
GS	GAS SERVICE FROM UNDERGROUND	SD	INVERT
GW	GUY WIRE ANCHOR	SD	TOP OF ASPHALT PAVEMENT
INV	INVERT ELEVATION	SD	TOP OF CURB
MC	METER CAN	SD	TOP OF GRATE
MCL	METER CAN WITH LINE	SD	EXISTING SPOT ELEVATION
MCV	METER CAN WITH VALVE	SD	PROPOSED SPOT ELEVATION
MH	MANHOLE	SD	EXISTING FLOWLINE
ML	METAL LANDING	SD	PROPOSED FLOWLINE
MLPC	METAL LIGHT POLE WITH CONCRETE BASE	SD	EXISTING CONTOUR
MR	METAL RACK	SD	PROPOSED CONTOUR
MS	METAL SIGN	SD	EXISTING DIRECTION OF FLOW
MSL	METAL STEPS WITH LANDING	SD	PROPOSED DIRECTION OF FLOW
OHC(2)	OVERHEAD COMMUNICATION LINE (# OF LINES)	SD	RIGHT OF WAY LINE
OHE(2)	OVERHEAD ELECTRIC LINE (# OF LINES)	SD	PUBLIC EASEMENT LINE
OHM	OVERHEAD ELECTRIC MAST	SD	HIGH POINT / DIVIDE
PLT	CONCRETE PLANTER	SD	PROPOSED CONCRETE
PVC	POLYVINYL CHLORIDE PIPE	SD	PROPOSED ASPHALT PAVING
RCP	REINFORCED CONCRETE PIPE	SD	
SAS	SANITARY SEWER	SD	
SAS/PM	SANITARY SEWER LINE BY PAINT MARK	SD	
SD	STORM DRAIN	SD	
SD/PM	STORM DRAIN BY PAINT MARK	SD	
SDP	SERVICE DROP POLE	SD	
SW	SIDEWALK	SD	
T/PM	TELEPHONE LINE BY PAINT MARK	SD	
TA	TOP OF ASPHALT	SD	
TC	TOP OF CURB	SD	
TCO	TOP OF CONCRETE	SD	
TEMP	TEMPORARY	SD	
TG	TOP OF GRATE	SD	
TS	TRAFFIC SIGN	SD	
TYP	TYPICAL	SD	
VG	VALLEY GUTTER	SD	
W/PM	WATER LINE BY PAINT MARK	SD	
WCR	CONCRETE WHEELCHAIR RAMP	SD	
WB	WATER LINE	SD	
WMB	WATER METER BOX	SD	
WSL	WOOD STEPS WITH LANDING	SD	
WVB	WATER VALVE BOX	SD	
X-WALK	PAINTED CROSSWALK	SD	
DECIDUOUS TREE		SD	
SHRUB		SD	
PAINTED UTILITY LINE		SD	



VICINITY MAP

SCALE: 1" = 750'

B-9



F.I.R.M.

PANEL 103

SCALE: 1" = 500'

OF 825

DATE 08-16-2012

LEGAL DESCRIPTION

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

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 INTERSECTE BOULEVARD N.E. ELEVATION = 5424.810 FEET (NAVD 1988)

TEMPORARY BENCHMARK (T.B.M.)

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

NOTE:

THIS IS NOT A BOUNDARY SURVEY; DATA IS SHOWN FOR ORIENTATION ONLY. THE 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 IS BASED UPON THE PARTIAL TOPOGRAPHIC AND UTILITY SURVEY PREPARED BY HIGH MESA CONSULTING GROUP, NMPS NO. 11184, DATED 12/11/2014 (2014.180.5).

HIGH MESA Consulting Group

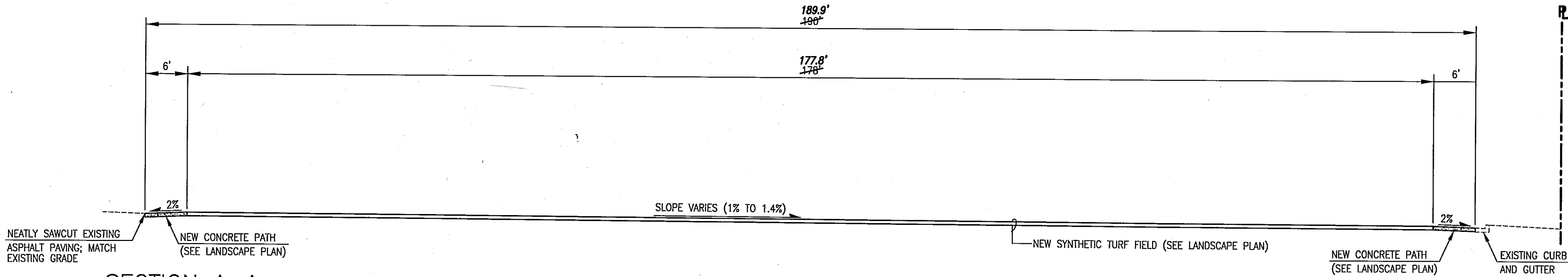
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PHONE: 505.345.4250 • FAX: 505.345.4254 • www.highmesacg.com

DRAINAGE PLAN AND CALCULATIONS
SYNTHETIC TURF FIELD
VENTANA RANCH ELEMENTARY SCHOOL

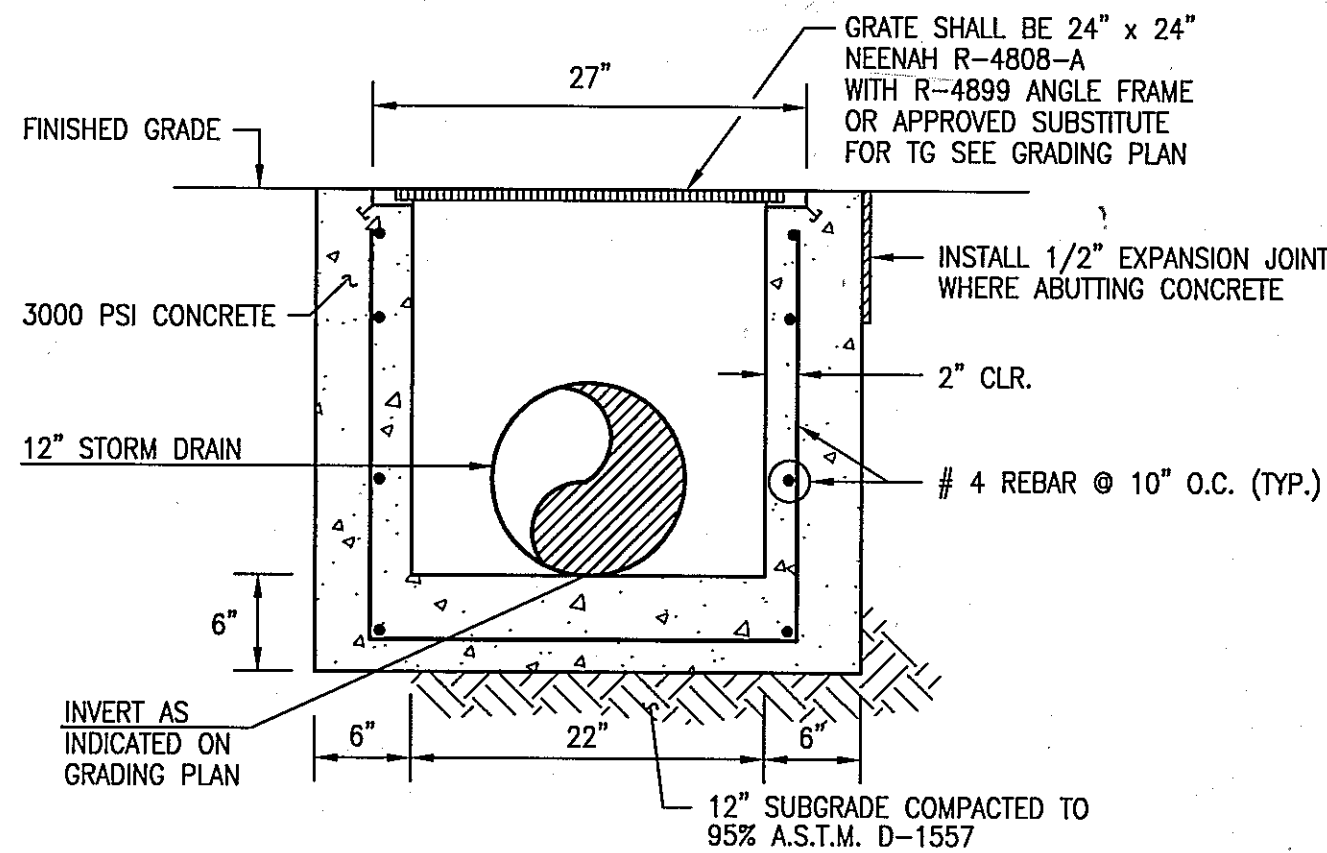
DESIGNED BY	J.G.M.
DRAWN BY	J.Y.R./S.C.C.
APPROVED BY	J.G.M.

NL	DATE	BY	REVISIONS
3	11/15	J.G.M.	RECORD DRAWING AND DRAINAGE CERTIFICATION

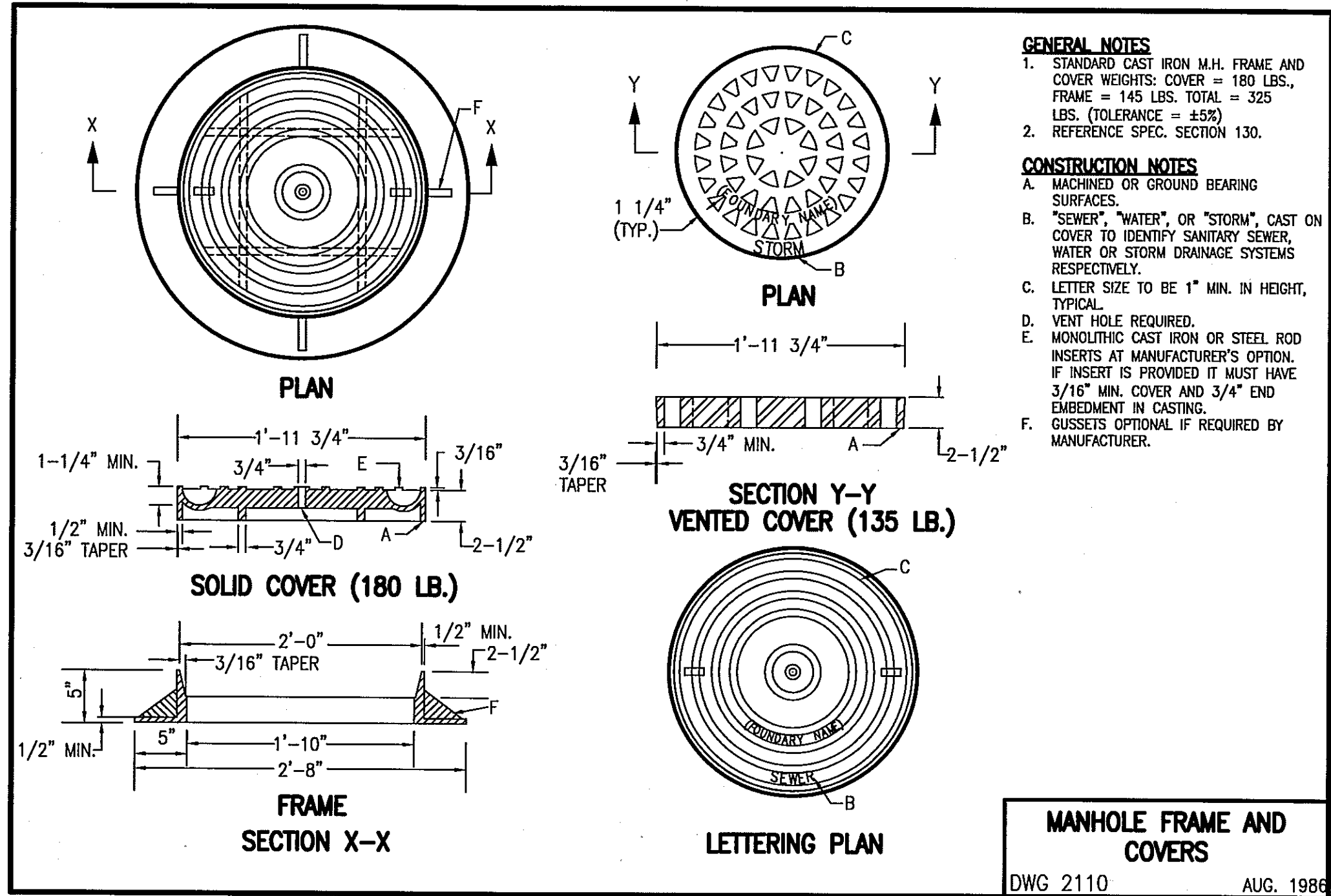
JOB NO.	2014.180.6
DATE	02-2015
SHEET	3 OF 7



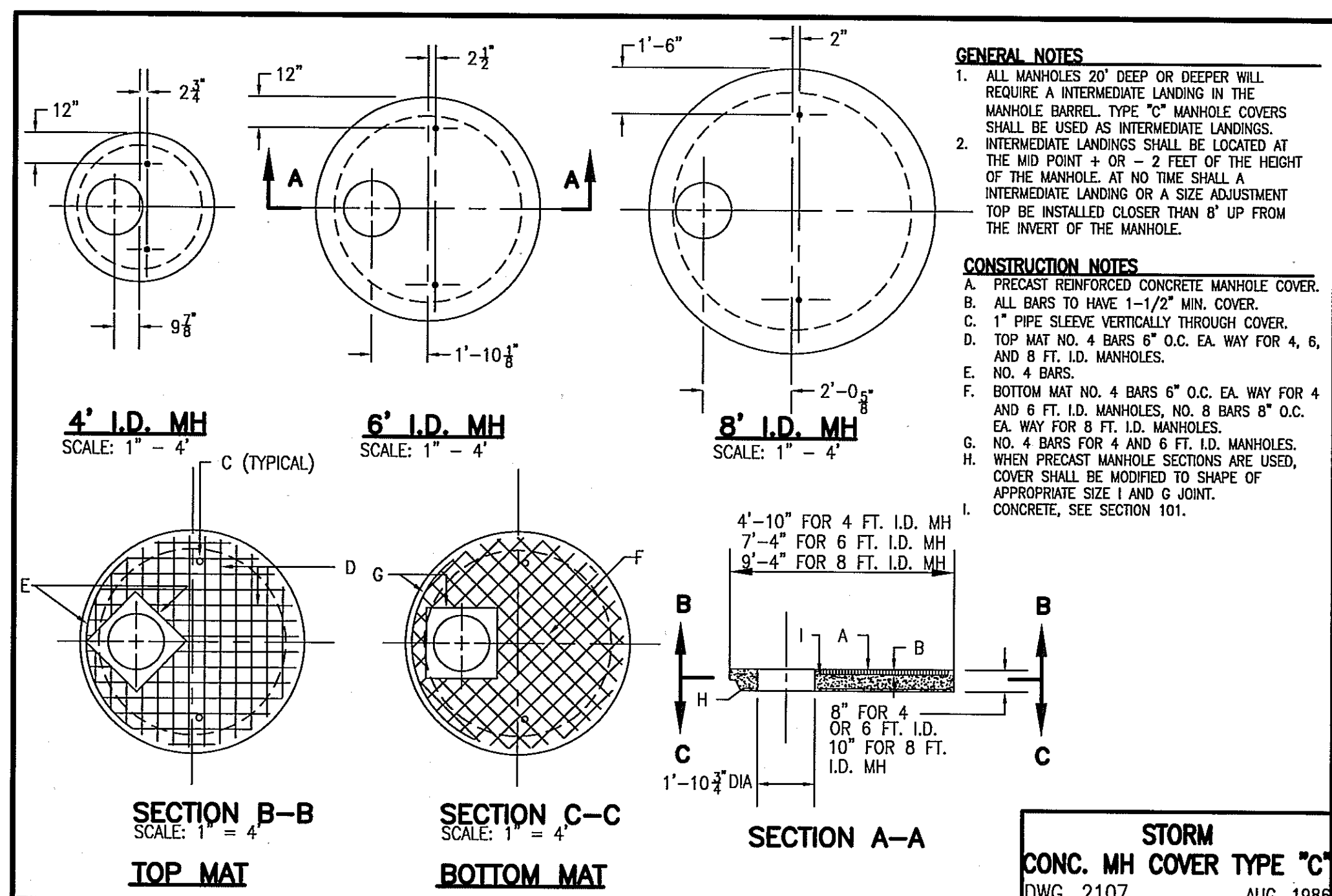
SECTION A-A
SCALE: 1" = 10' - 0"



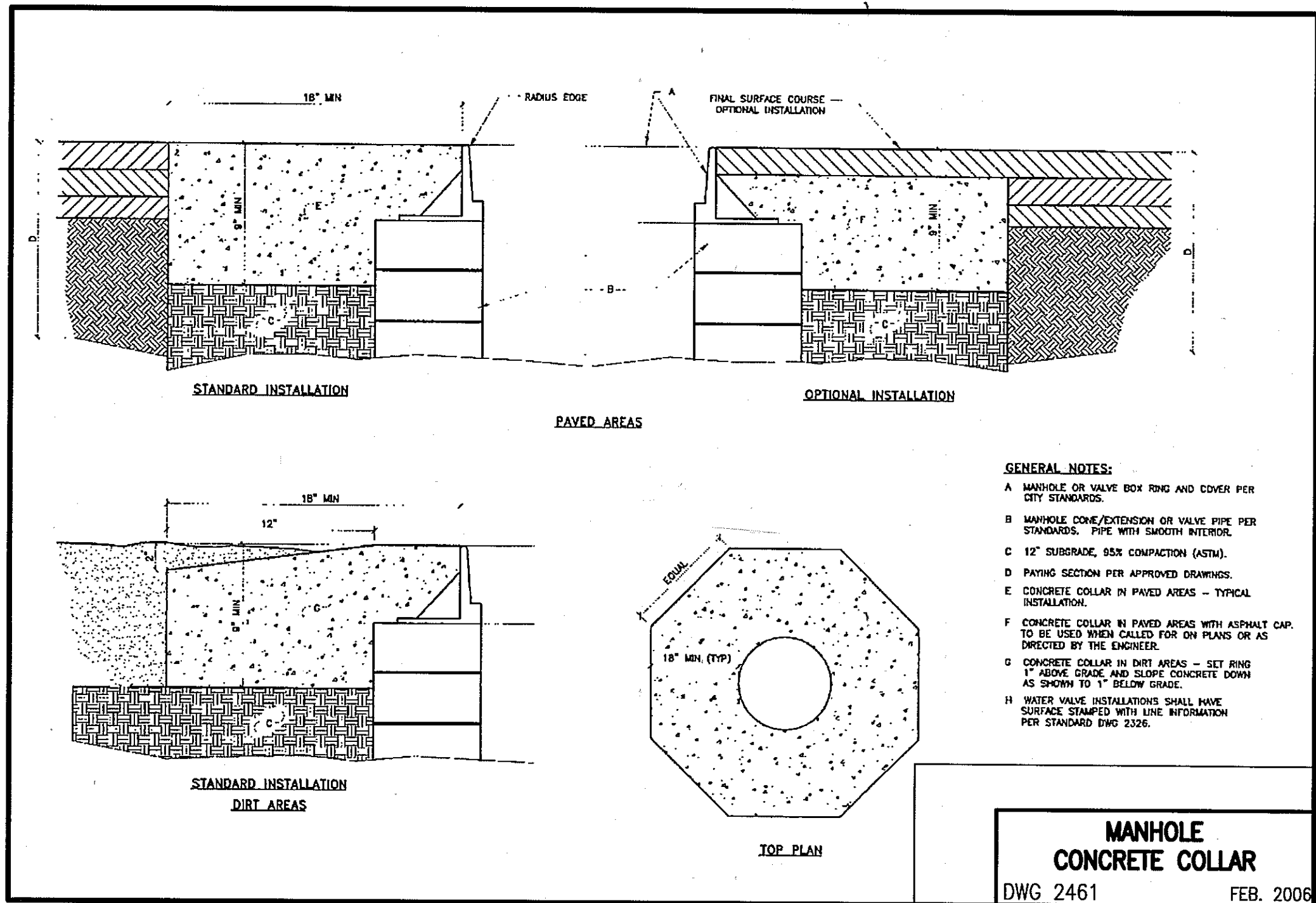
TYPICAL 24\"X24\" STORM INLET SECTION
SCALE: 1" = 1' - 0"



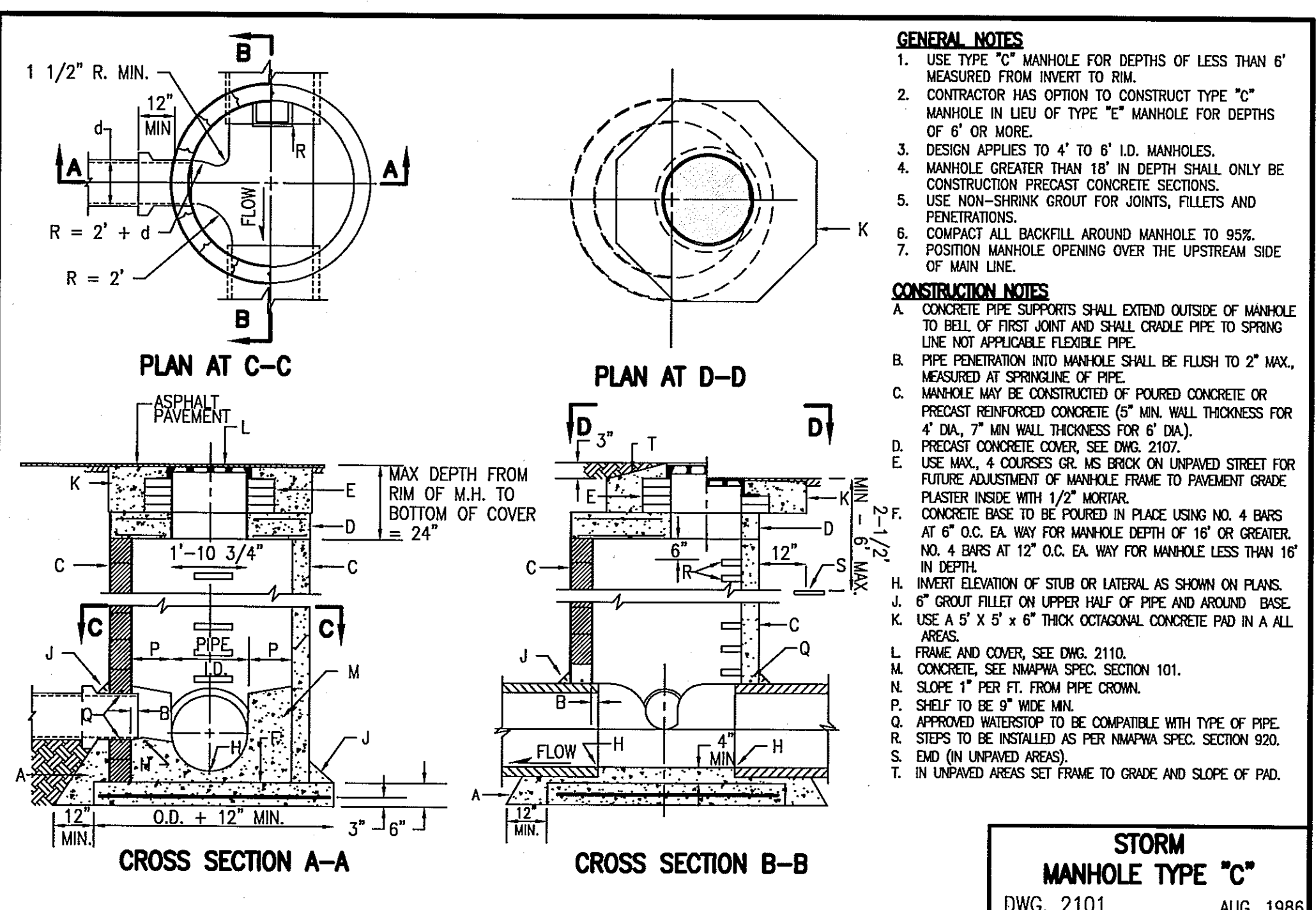
MANHOLE FRAME AND COVERS
DWG. 2110 AUG. 1986



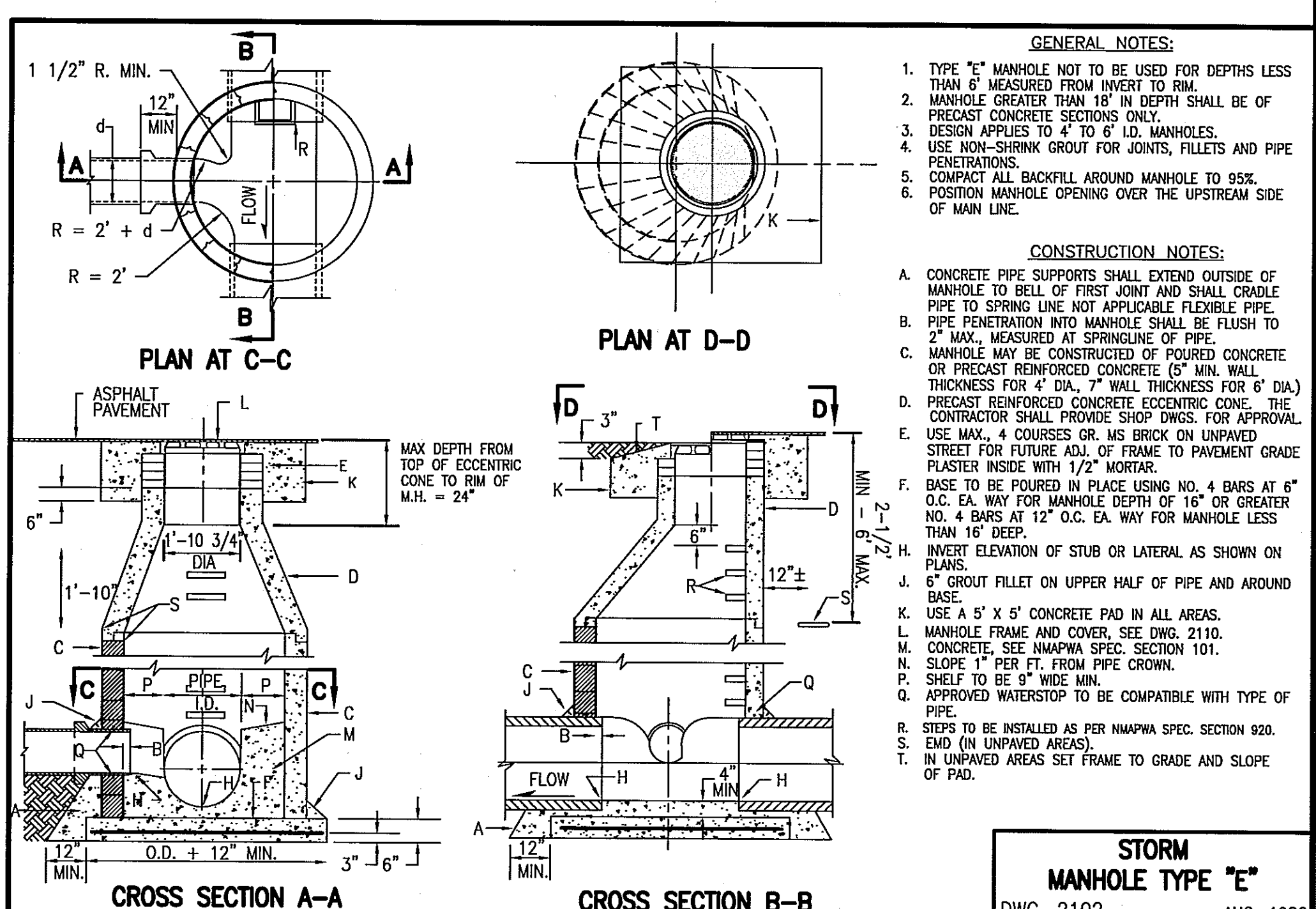
STORM CONC. MH COVER TYPE \"C\"
DWG. 2107 AUG. 1986



MANHOLE CONCRETE COLLAR
DWG. 2461 FEB. 2006



STORM MANHOLE TYPE \"C\"
DWG. 2101 AUG. 1986



STORM MANHOLE TYPE \"E\"
DWG. 2102 AUG. 1986

NOTE:
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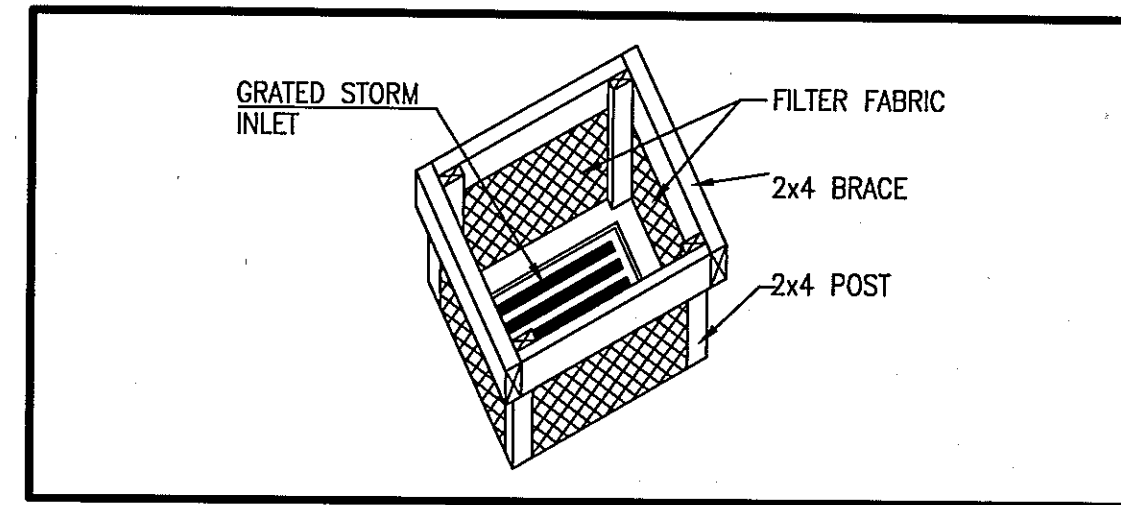
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GRADING AND DRAINAGE SECTIONS AND DETAILS
SYNTHETIC TURF FIELD
VENTANA RANCH ELEMENTARY SCHOOL

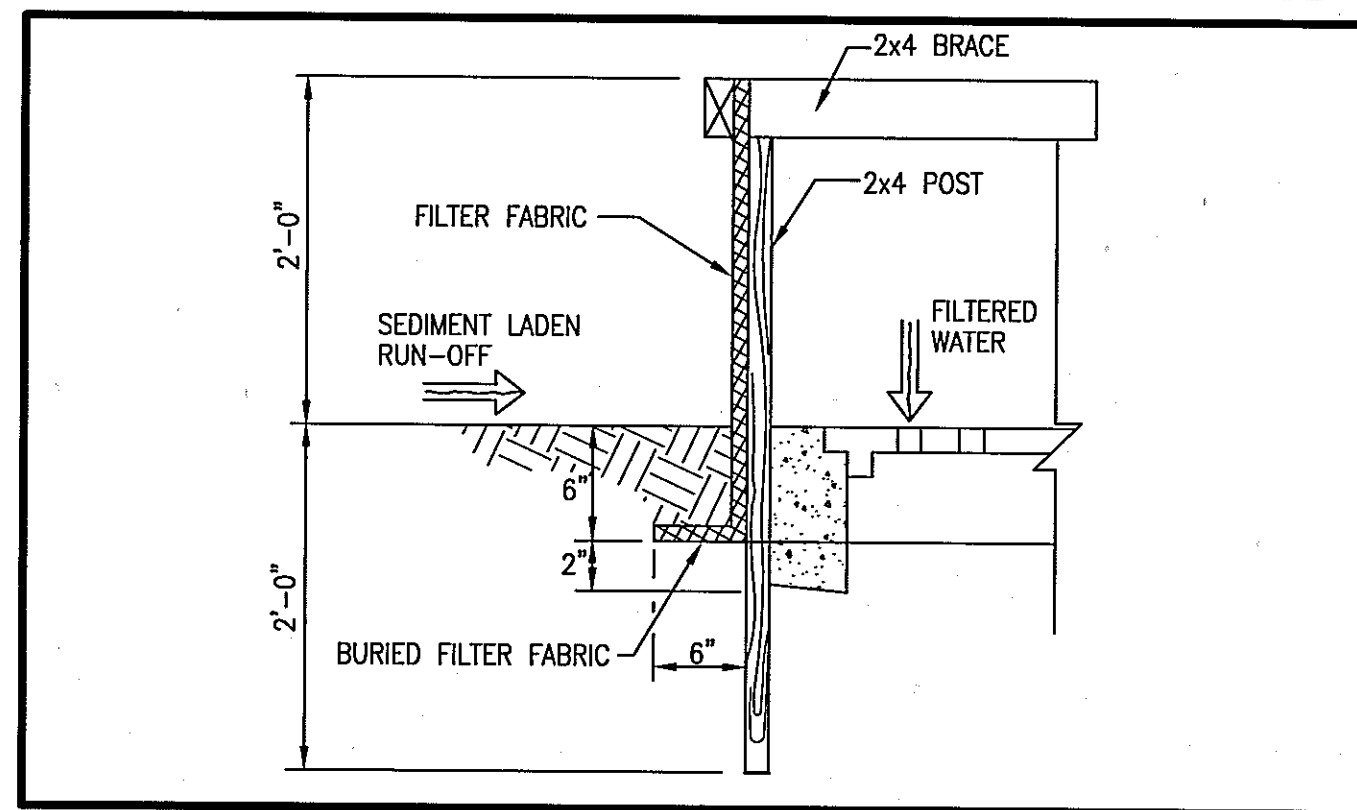
RECORD DRAWING

DESIGNED BY	DATE	BY	REVISIONS	JOB NO.
J.G.M.	11/15	J.G.M.	RECORD DRAWING	2014.180.6
DRAWN BY	DATE	BY	REVISIONS	JOB NO.
J.Y.R./S.C.C.				02-2015
APPROVED BY	DATE	BY	REVISIONS	JOB NO.
J.G.M.				5 OF 7

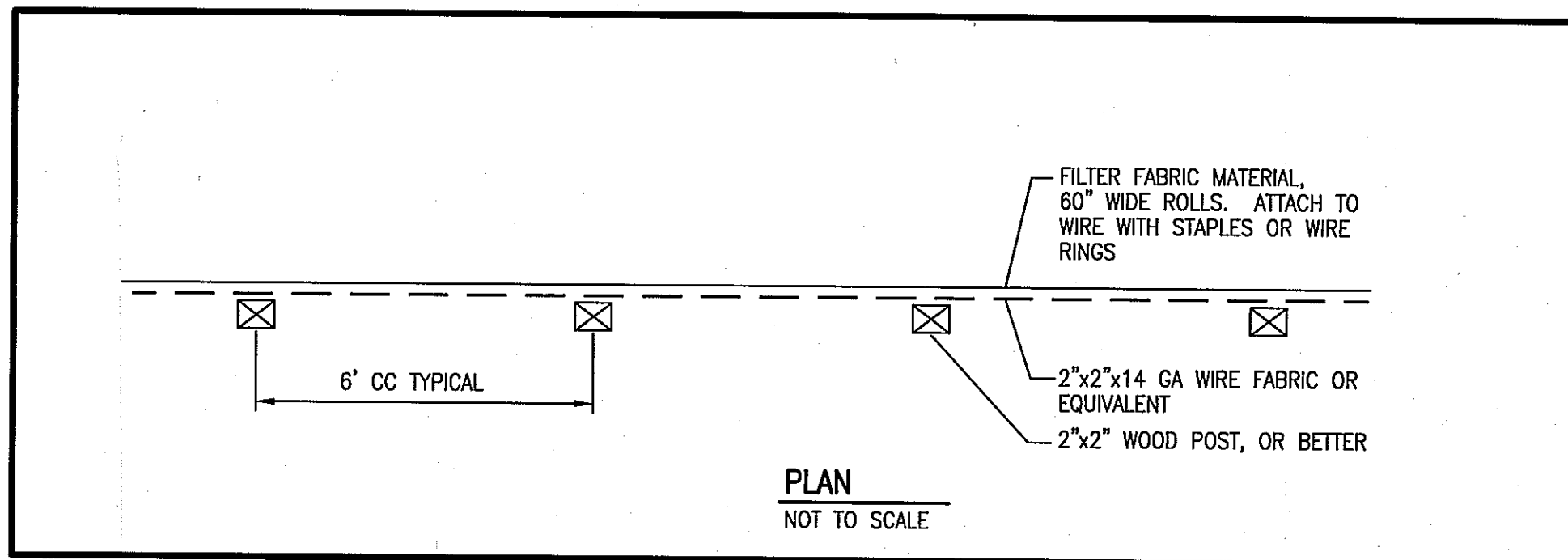
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File Name: 1806_SPS_RECORDING Plot Time: 09:27 am



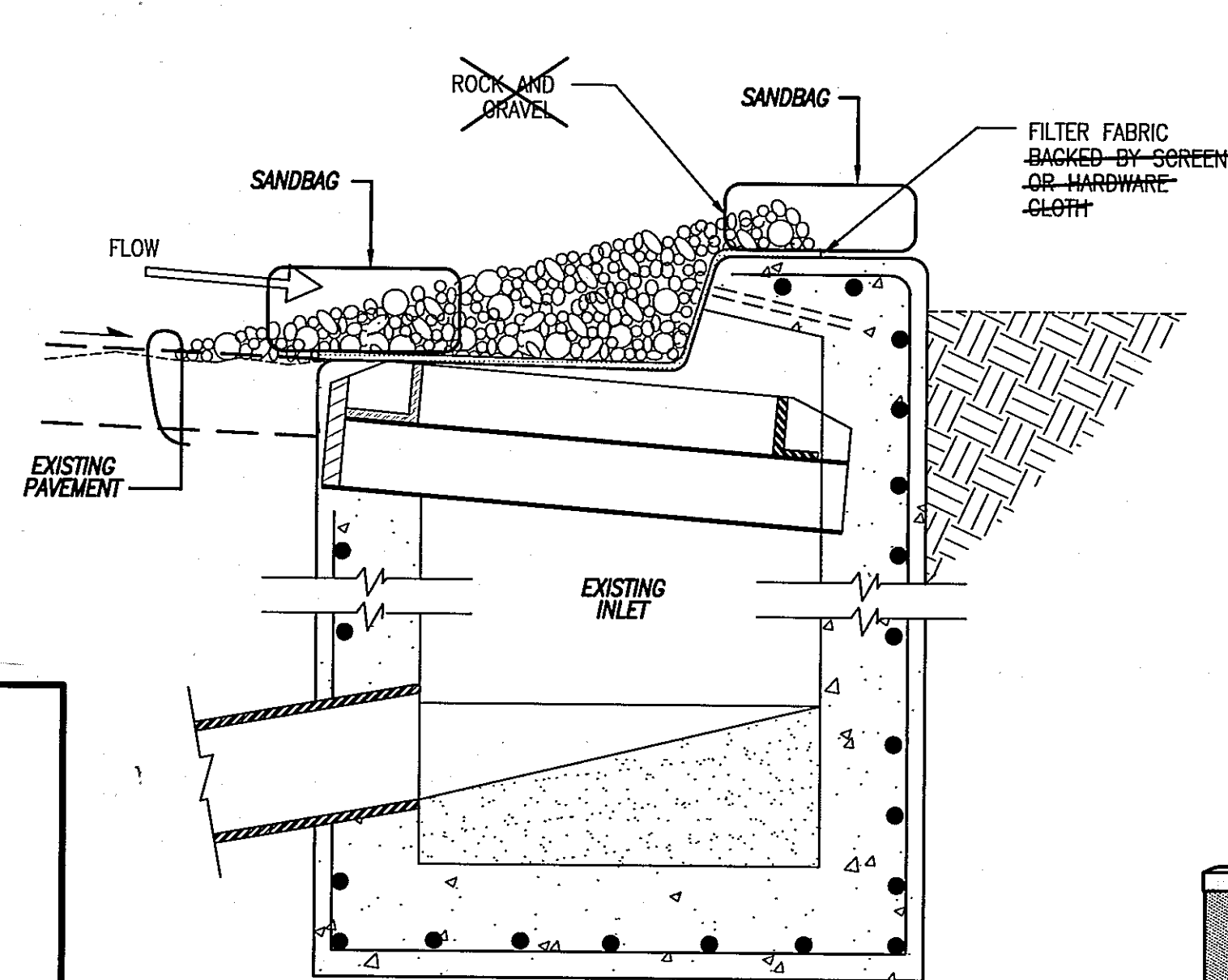
SILT FENCE INLET PROTECTION
NOT TO SCALE



SILT FENCE INLET PROTECTION SECTION
NOT TO SCALE



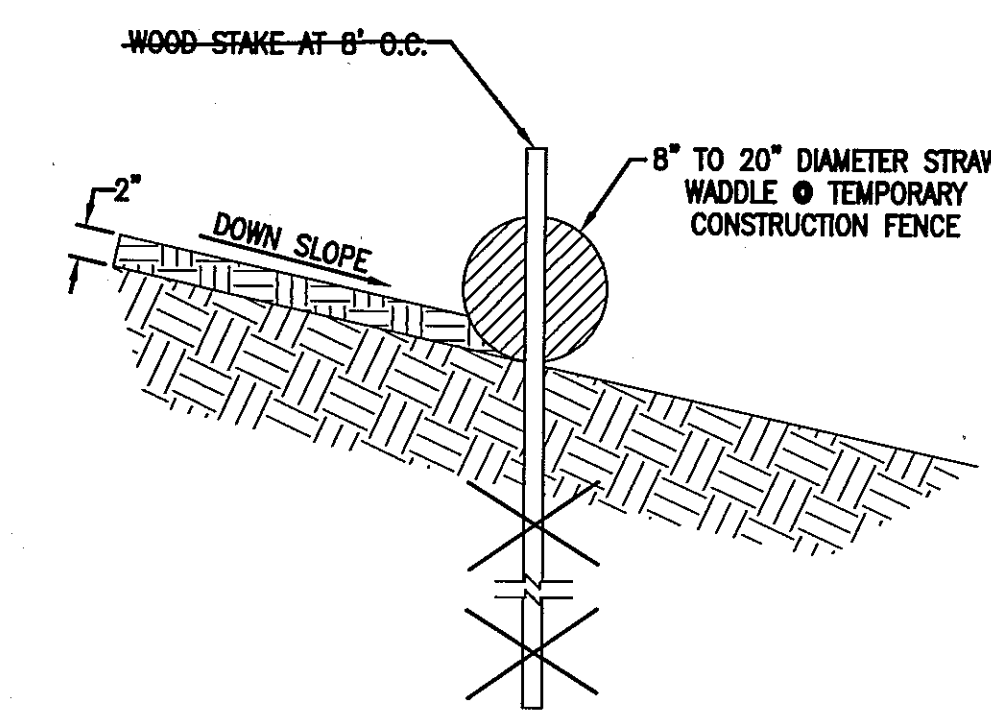
PLAN
NOT TO SCALE



TYPICAL STORM INLET PROTECTION
SCALE: 1" = 1'-0"

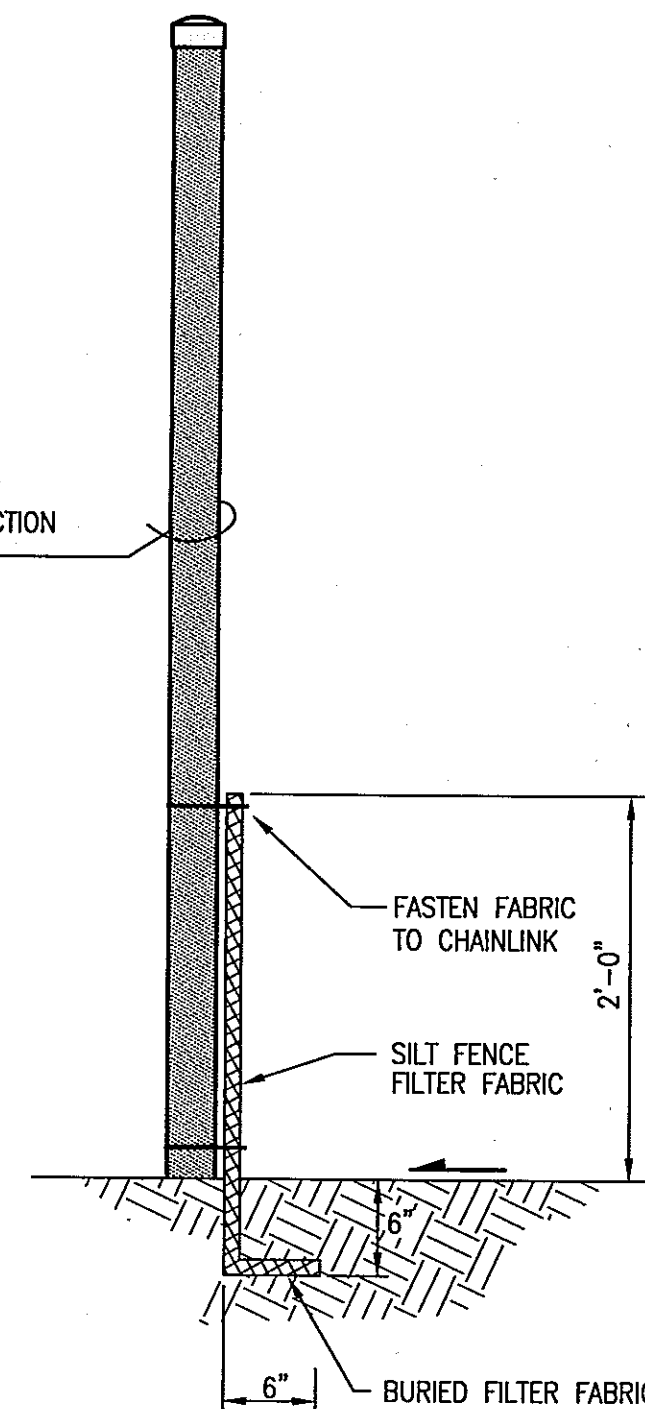
NOTE:

ROCK AND GRAVEL REMOVED AND REPLACED WITH SANDBAGS @ EDGE OF FILTER FABRIC TO ACT AS BALLAST WHILE MAKING PERIODIC SILT REMOVAL EASIER. FILTER FABRIC COLLECTED ALOT OF SILT DURING CONSTRUCTION.



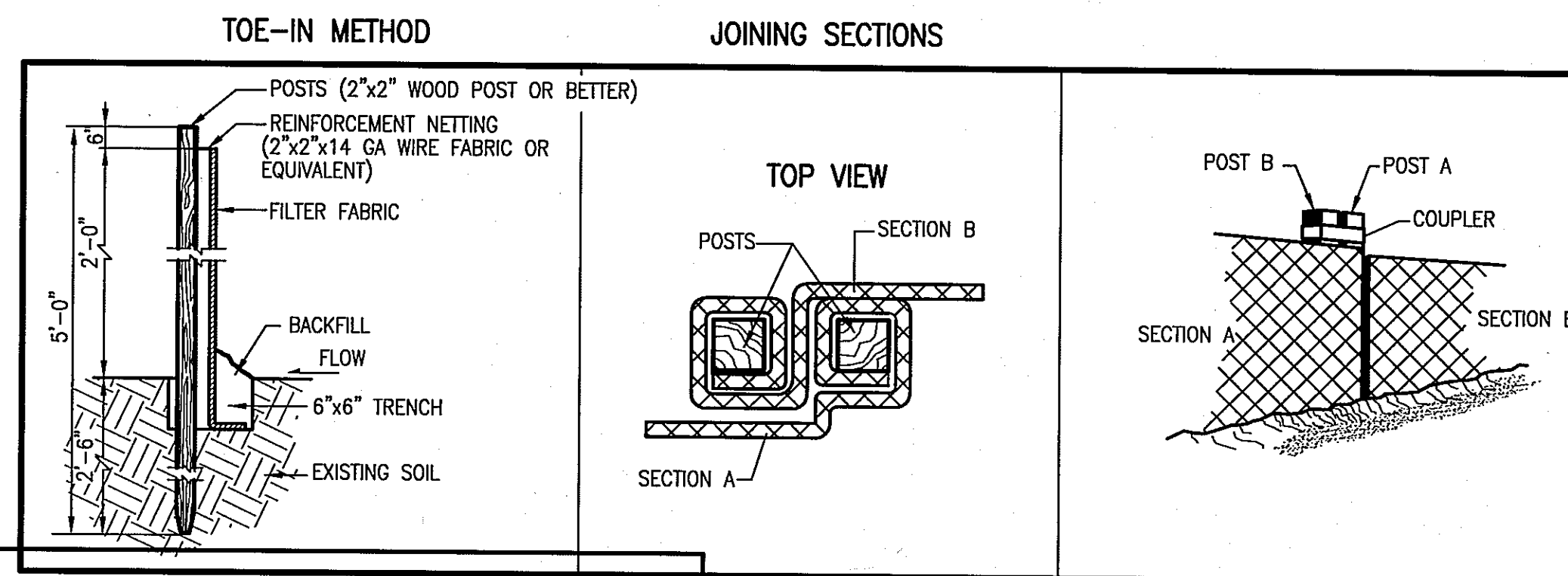
TYPICAL STRAW WADDLE INSTALLATION SECTION
SCALE: 1" = 1'-0"

(OPTIONAL BMP)



CONSTRUCTION FENCE/SILT FENCE SECTION
SCALE: 1" = 2'-0"

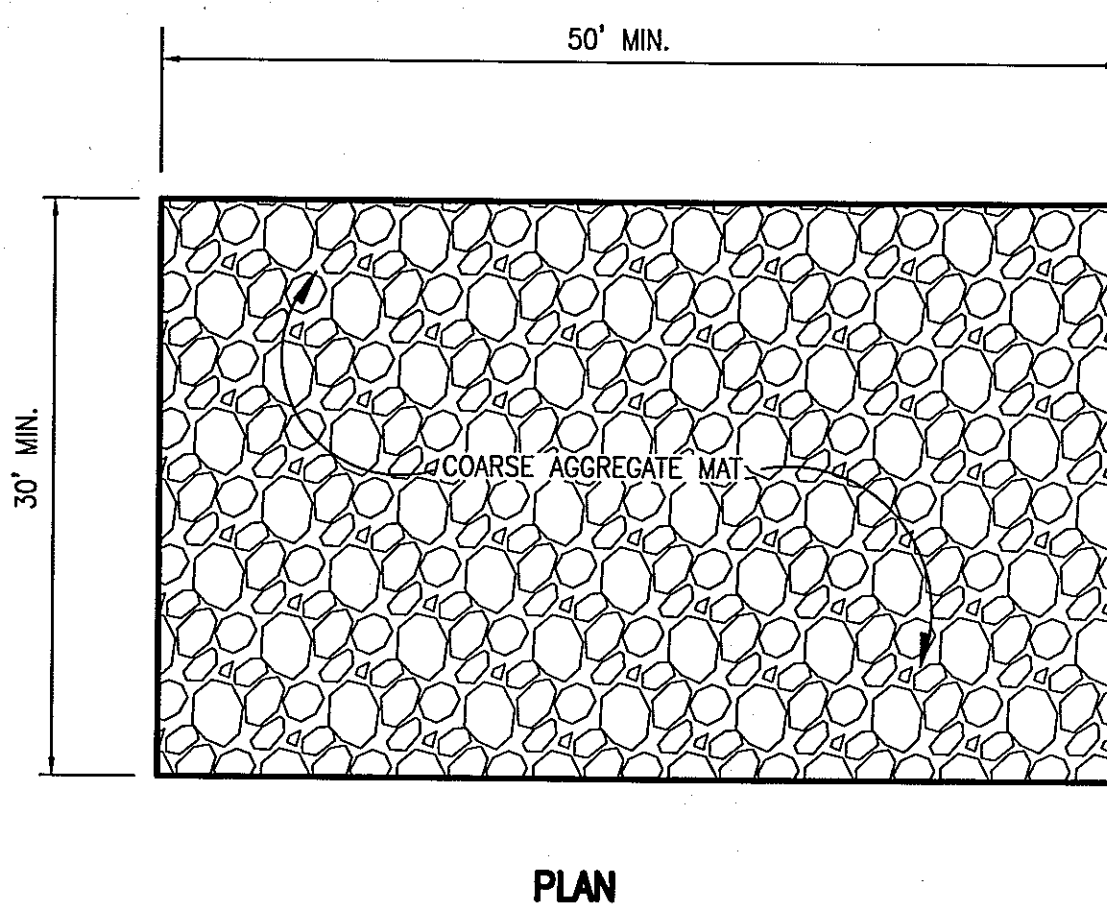
(OPTIONAL BMP)



NOTE:

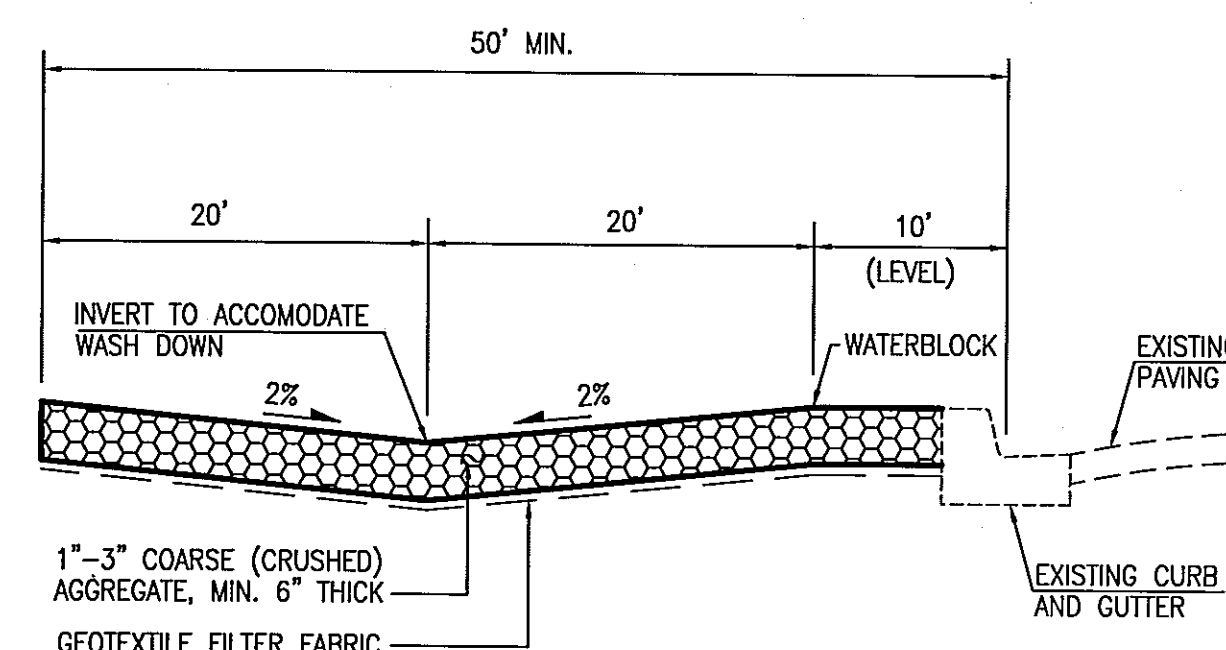
THIS IS NOT A BOUNDARY SURVEY; DATA IS SHOWN FOR ORIENTATION ONLY. THE BOUNDARY INFORMATION DEPICTED BY THIS PLAN IS BASED UPON AN ADJACENT PROPERTY SURVEY PREPARED BY HIGH MESA CONSULTING GROUP, NMPS 11184, DATED 12/11/2014 (2014.180.5). THE TOPOGRAPHIC INFORMATION DEPICTED HEREON IS BASED UPON THE PARTIAL TOPOGRAPHIC AND UTILITY SURVEY PREPARED BY HIGH MESA CONSULTING GROUP, NMPS NO. 11184, DATED 12/11/2014 (2014.180.5).

REFABRICATED SILT FENCE DETAILS



PLAN

CONSTRUCTION ENTRANCE STABILIZATION
SCALE: 1" = 10' HORIZ.
1" = 2' VERT



SECTION A-A

EROSION AND SEDIMENT CONTROL PLAN NOTES:

- THIS PLAN ADDRESSES GENERAL AND SPECIFIC MEASURES FOR CONSTRUCTION PHASE EROSION, SEDIMENT AND DUST CONTROL. IT IS INTENDED TO COMPLEMENT THE PROJECT SPECIFIC STORM WATER POLLUTION AND PREVENTION PLAN (SWPPP) PREPARED FOR THIS PROJECT.
- THE CONTRACTOR SHALL SECURE ALL REQUIRED PERMITS BEFORE BEGINNING CONSTRUCTION.
- THE CONTRACTOR SHALL INSTALL ALL PERIMETER BMPs BEFORE BEGINNING CONSTRUCTION.
- REFER TO THE SWPPP PREPARED BY HIGH MESA CONSULTING GROUP, DATED 12/11/2014 (2014.180.5) FOR PROJECT SPECIFIC PHASING AND INFORMATION. THIS PROJECT SHALL BE IMPLEMENTED IN PHASES TO MINIMIZE THE EXTENT AND DURATION OF SURFACE DISTURBANCE.
- REFER TO THE GRADING AND DRAINAGE PLAN PREPARED BY HIGH MESA CONSULTING GROUP, DATED 12/11/2014 (2014.180.5) FOR PROJECT SPECIFIC PHASING AND INFORMATION.
- 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.
- THE CONTRACTOR SHALL CLEAN AND REMOVE ALL FUGITIVE DUST, SOIL AND DEBRIS RESULTING FROM THIS PROJECT FROM THE ADJACENT STREETS AT THE END OF EACH DAY.
- THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN ALL GOOD HOUSEKEEPING MEASURES OUTLINED IN THE SWPPP INCLUDING, BUT NOT LIMITED TO, DAILY PICKING UP TRASH, LITTER AND CONSTRUCTION DEBRIS.
- THE CONTRACTOR SHALL PROMPTLY REMOVE SEDIMENT ACCUMULATION FROM SILT FENCES AND OTHER STRUCTURAL BMPs WITHIN 48 HOURS OF A RAINFALL EVENT.
- THE CONTRACTOR SHALL IMPLEMENT ONSITE STRUCTURAL EROSION CONTROL MEASURES AS REQUIRED TO COMPLY WITH THE EROSION AND SEDIMENT CONTROL PLAN AND SWPPP. THESE MEASURES MAY INCLUDE BUT ARE NOT LIMITED TO SILT FENCES, EARTHEN DIKES, DRAINAGE DIVERSIONS, SEDIMENT TRAPS, CHECK DAMS, SUBSURFACE DRAINS, PIPE SLOPE DRAINS, LEVEL SPREADERS, STORM WATER RETENTION SYSTEMS, GABIONS AND TEMPORARY OR PERMANENT SEDIMENT DETENTION BASINS. THE FOLLOWING MEASURES ARE PROPOSED FOR THIS PROJECT:
 - PERIMETER SILT FENCE
 - CONSTRUCTION ENTRANCE STABILIZATION
 - ONSITE INLET PROTECTION
 - GRAVEL MULCH
- THE CONTRACTOR SHALL MINIMIZE OFFSITE VEHICLE TRACKING OF SEDIMENT AND DUST GENERATION.
- CONCRETE TRUCKS SHALL BE SENT BACK TO THE PLANT FOR WASHING; THE WASHING OF CONCRETE TRUCKS SHALL NOT BE PERMITTED ON THIS SITE UNLESS OTHERWISE PROVIDED FOR BY THIS PLAN. IF PROVIDED FOR BY THIS PLAN, CONCRETE TRUCKS MAY ONLY WASH OUT IN A DESIGNATED AND LINED WASHOUT FACILITY.
- OFFSITE MATERIAL STORAGE AREAS USED BY THIS PROJECT ARE CONSIDERED PART OF THE PROJECT AND THEREFORE SUBJECT TO THE REQUIREMENTS OF THE EROSION AND SEDIMENT CONTROL PLAN AND SWPPP.
- UPON COMPLETION OF MASS GRADING, ALL DISTURBED AREAS SHALL BE STABILIZED WITH PERMANENT CONSTRUCTION, LANDSCAPING, VEGETATION AND/OR GRAVEL MULCH. SILT FENCING CAN BE REMOVED UPON SUCCESSFUL ESTABLISHMENT OF VEGETATION.
- THROUGHOUT THE DURATION OF THIS PROJECT, CONTRACTOR SHALL IMPLEMENT, MAINTAIN AND INSPECT ALL BMPs, KEEPING RECORDS OF EACH INSPECTION IN ACCORDANCE WITH THE SWPPP, AND KEEP RECORDS OF THE INSTALLATION MAINTENANCE, AND REMOVAL OF EACH BMP SPECIFIED BY THIS PLAN OR OTHERWISE PROVIDED FOR THROUGHOUT THE LIFE OF THE PROJECT.
- THOSE PORTIONS OF THE COMPLETED PROJECT NOT STABILIZED WITH PERMANENT CONSTRUCTION OR FORMAL LANDSCAPING SHALL BE REVEGETATED WITH NATIVE GRASS SEEDING FOR SANDY SOILS PER THE SEED MIX SPECIFIED HEREON AND SPECIFICATIONS CONTAINED WITHIN THE SWPPP.
- FINAL STABILIZATION OF THE PROJECT SITE WILL CONSIST OF THE FOLLOWING MEASURES:
 - PERMANENT PAVING
 - FORMAL LANDSCAPING (SYNTHETIC TURF)
 - GRAVEL MULCH
 - REVEGETATION WHEN APPLICABLE
- TOTAL SITE AREA = 12.0 ACRES (BASED ON HMCG BOUNDARY SURVEY)
- TOTAL DISTURBED AREA = 1.9 ACRES

SEED MIX FOR SANDY SOILS

VARIETY/COMMON NAME	GENUS/SPECIES	PLS/ACRE
"PALOMA" INDIAN RICE GRASS	ORYZOPSIS HYMENOIDES	5.0
"VIVA" GALLETIA GRASS	HILARIA JAMESII	1.0
"NINER" SIDE OATS GRAMA	BOUTELOUA CURTIPENDULA	3.0
"HATCHITA" BLUE GRAMA	BOUTELOUA GRACILIS	1.0
SAND DROPSEED (NM REGION)	SPOROBOLUS CRYPTANDRUS	1.0
FOUR-WING SALTBUSS (NM REGION)	ATRIPLEX CANESCENS (DE-WINGED)	1.0
TOTAL RATE:		12.0 LBS/ACRE

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EROSION AND SEDIMENT CONTROL PLAN NOTES AND DETAILS
SYNTHETIC TURF FIELD
VENTANA RANCH ELEMENTARY SCHOOL

DESIGNED BY	J.G.M.	NO.	DATE	BY	REVISIONS	JOB NO.
DRAWN BY	J.Y.R./S.C.C.	1	9/15	J.G.M.	UPDATE SITE MAP	2014.180.6
APPROVED BY	J.G.M.	2	11/15	J.G.M.	RECORD DRAWING	DATE 02-2015
						SHEET 7 OF 7

12-30-2015

