

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

July 7, 2004

Jeff Mortensen, PE Jeff Mortensen & Associates 6010-B Midway Park Blvd. NE Albuquerque, NM 87109

RE: Ventana Ranch Elementary Master Drainage Plan Engineer's Stamp dated 6-15-04, (B-9/D3H1)

Dear Mr. Mortensen:

Based on the information provided in your submittal received 6-17-04, the above referenced plan is approved for Paving Permit for Phase 1A and Master Drainage Plan. Future phases will require separate submittals for Building Permits. Please attach a copy of the approved plan to the construction sets prior to sign-off by Hydrology.

In order to allow for future phases to proceed, I will need an Engineer's Certification for my file.

This project requires a National Pollutant Discharge Elimination System (NPDES) permit. If you have any questions regarding this permit please feel free to call the DMD Storm Drainage Design section at 768-3654 (Charles Caruso) or 768-3645 (Bryan Wolfe).

If you have any questions, please contact me at 924-3986.

Sincerely,

Bradley L. Bingham, PE

Principal Engineer, Planning Dept.

Development and Building Services

C: Charles Caruso, DMD Storm Drainage Design File

DESCRIPTION DRAWINGS F.I.R.W.

Sheet Title

JEFF MORTENSEN & ASSOCIATES, INC.

□ 6010-B MIDWAY PARK BLVD, NE.

□ ALBUQUERQUE □ NEW MEXICO 87109

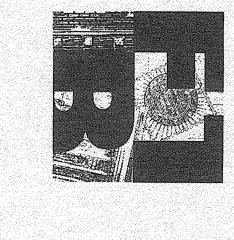
□ ENGINEERS □ SURVEYORS (505) 345-4251

□ FAX: 505 345-4254 □ ESTABLISHED 1977

2003.084.1

VENTANA RANCH
ELEMENTARY SCHOOL
6801 VENTANA VILLAGE ROAD N.W.
ALBUQUERQUE, N.M. 6100 Indian School Rd. NE
A I bu que r que RM
5 0 5 - 8 8 3 - 5 2 0 0
5 0 5 - 8 8 4 - 5 3 9 0 VENTANA RANCH
DRAINAGE PLAN AND CALCULATIONS SUITE 210 87110 PHONE Date JUNE 1, 2004

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BARD

SION CONTROL MEASURES:

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

HE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL XCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE XCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN HE STREET.

HE STREET.

WITH THE CITY AND/OR FILE A NOTICE OF INTENT (N.O.I.) WITH THE EPA PRIOR TO BEGINNING CONSTRUCTION.

WITH THE EPA PRIOR TO BEGINNING CONSTRUCTION, THEREFORE, NO C.O.A. SPECIFICATION 1012 "NATIVE GRASS SEEDING". THIS CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO EPARATE PAYMENT WILL BE MADE.

AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BI BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROCOPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
 BACKFILL COMPACTION SHALL BE ACCORDING TO RESIDENTIAL STREET USE.
 MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILL OF THE OWNER OF THE PROPERTY SERVED.

18195

INSISTS OF THE PERMANENT CONSTRUCTION OF THE CORE FACILITIES AND PAVED PARKING HE TIME THAT PHASE 1B IS OCCUPIED, MOST OF THE PORTABLE CLASSROOMS WILL LIKELY MAJORITY OF THE DEVELOPED RUNOFF FROM PHASES 1B AND 2 WILL DISCHARGED INTO LAS AD NW VIA NEW DRIVEWAY ENTRANCES AND A DIRECT CONNECTION TO THE BACK OF THE RM INLET ALONG THAT PART OF THE SITE FRONTAGE VIA SO#19 PROCESS. A SMALLER PORTION E 1B AND 2 RUNOFF WILL DRAIN EAST BENEATH AND ACROSS FUTURE PLAYGROUND AREA TO ENTANA HILLS ROAD NW STORM DRAIN VIA THE PRIVATE STORM DRAIN CONSTRUCTED AS PART IN THE TIME THAT PHASE 2 IS OCCUPIED, MOST OF THE PORTABLE CLASSROOMS WILL LIKELY FROM THE SITE AND RELOCATED TO ANOTHER SCHOOL SITE. AT THAT TIME, THE AREA ONCE THE PORTABLES WILL BE REDEVELOPED AND WILL PROBABLY RESULT IN A NET DECREASE IN ED RUNOFF GENERATED BY AND LEAVING THE SITE.

D CONDITIONS

ABOVE, THE FIRST PHASE OF THIS PROJECT, 1A, IS UNDER CONSTRUCTION. THE SECOND PHASE, ABOVE, THE PERMANENT BUILDING CONSTRUCTION IS SCHEDULED TO GO TO BUILDING PERMIT IN JTURE. PHASE 1B WILL REQUIRE A SEPARATE SUBMITTAL FOR BUILDING PERMIT APPROVAL. IN E, THE SITE WILL BE PREPARED FOR THE TEMPORARY CONSTRUCTION IN BASIN E. THE JUNOFF FROM BASIN E WILL ENTER VENTANA HILLS ROAD NW VIA TWO NEW DRIVEWAY AND A DIRECT CONNECTION TO AN EXISTING 24—INCH STORM DRAIN STUB—OUT. THE PORTABLE ARE TEMPORARY TO BE REMOVED UPON THE OCCUPATION OF THE PHASE 2 CLASSROOM

= $Q_{PA}^{A}_{A} + Q_{PB}^{A}_{B} + Q_{PC}^{A}_{C} + Q_{PD}^{A}_{D}$ = Q_{100} = 2.87(3.30) = 9.5 cfs

= $(E_W/12)(A_T)$ = (0.99/12)(8.70) = 0.7178

HIC DATA PRESENTED HEREON DEMONSTRATES THE EXISTING CONDITIONS OF THE SITE. AT ROUGH GRADING FOR THE PORTABLES CONSTRUCTION (PHASE 1A) IS IN PROCESS. THE SITE IS BY TWO SEPARATE DRAINAGE BASINS. BASIN W, THE WEST BASIN, DRAINS WEST INTO LAS NW, A FULLY IMPROVED CITY STREET WITH PUBLIC STORM DRAIN FACILITIES. BASIN E, THE VAINS EAST INTO VENTANA HILLS ROAD NW, ANOTHER FULLY IMPROVED CITY STREET WITH DRAIN FACILITIES. THE PRESENCE OF THOSE PUBLIC INFRASTRUCTURE IMPROVEMENTS FREE DISCHARGE OF DEVELOPED RUNOFF FROM THIS SITE.

BY THE VICINITY MAP, THE SITE IS GENERALLY LOCATED AT THE NORTHEAST CORNER OF THE VICINITY MAP, THE SITE IS GENERALLY LOCATED AT THE NORTHEAST CORNER OF THE VICINITY OF VENTANA RANCH. AS SHOWN BY PANEL 103 OF 825 OF THE NATIONAL FLOOD INSURANCE COOD INSURANCE RATE MAPS PUBLISHED BY FEMA FOR BERNALILLO COUNTY, NEW MEXICO, 20, 1996, THIS SITE DOES NOT LIE WITHIN A DESIGNATED FLOOD HAZARD ZONE.

UND DOCUMENTS

ATION OF THIS PLAN FOLLOWED THE CONCEPTS SET FORTH IN THE ABOVE REFERENCED PLANS OF WELL AS THE PRE-DESIGN CONFERENCE RECAP DATED 11-05-2003 AND ATTACHED HERETO FOR THIS SUBMITTAL IS A FOLLOW-UP TO THE ROUGH GRADING PLAN PREPARED BY THIS OFFICE 8-2004 AND APPROVED FOR ROUGH GRADING 03-18-2004.

JCTION AND EXECUTIVE SUMMARY

JT, LOCATED IN VENTANA RANCH, REPRESENTS THE PHASED DEVELOPMENT OF AN ALBUQUERQUE DOLS ELEMENTARY SCHOOL. THE PHASE 1A IS THE DEVELOPMENT OF A PORTABLE CLASSROOM HE NEXT PHASE, 1B, WILL BE THE CONSTRUCTION OF THE CORE FACILITIES WITH PERMANENT DIASSESSION CONSTRUCTION. THE SITE LIES WITHIN NICH AND IS GOVERNED BY THE VENTANA RANCH MASTER PLAN AND THE 1998 MASS GRADING RACTS 25A1 AND 26B1.

JAL IS MADE IN SUPPORT OF MASTER DRAINAGE PLAN FOR THE FULL BUILD—OUT OF THE SITE IN TRANSPONDED TO THE SITE OF THE SITE OF

CONSTRUCTION NOTES:

1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM 260-1990 (ALBIQUERQUE AREA), 1-800-221-ALERY(2537) (STATEWIDE), FOR LOCATION OF EXISTING UTILITIES.

2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SYSTEM CONTRACTOR SHALL ORSTRUCTIONS. SHOULD A CONFELICT EXIST, THE CONTRACTOR SHALL ORSTRUCTIONS. SHOULD A CONFELIC EXIST, THE CONTRACTOR SHALL ORSTRUCTIONS. SHOULD A CONFELIC EXIST, THE CONTRACTOR SHALL RESOLVED WITH A MINIMUM AMOUNT OF DELYM. THE CONTRACTOR SHALL RESOLVED WITH A MINIMUM AMOUNT OF DELYM. THE CONTRACTOR SHALL RESOLVED WITH A MINIMUM AMOUNT OF DELYM. THE CONTRACTOR SHALL RESOLVED WITH A MINIMUM AMOUNT OF DELYM. THE CONTRACTOR SHALL RESOLVED WITH A MINIMUM AMOUNT OF DELYM. THE CONTRACTOR SHALL BE RESOLVED WITH A MINIMUM AMOUNT OF DELYM. THE CONTRACTOR SHALL BE RESOLVED WITH A MINIMUM AMOUNT OF DELYM. THE CONTRACTOR SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.

3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES. THE FRESHOWN IN A CONSTRUCTION CROMERO OF ALBUQUERQUE STANDARDS AND PROCEDURES. THE INE CONSTRUCTION WAS BE MOONED BY THE OWNER OF SAID UTILITY LINES, PIPELINES, AND MAY OFT BE COMPRENCES. THE ENGURER HAS CONJUDICTED ONLY PRELIMING MINESTIGATION OF THE ENGURER HAS CONJUDICTED ONLY PRELIMING MINISTER STATUTES, MUNICIPAL AND CONJUDICATE AND ALL DAMAGE CAUSED BY ITS FULLLY RESPONSIBILE FOR ANY DEPRELIMES, AND LANDSCAPED AREAS SUJACENIT TO HE STRUCTURE. FOR CONSTRUCTION PROVIDED HAS CONTRACTOR IN T

CHELON PL

FIGAIG FIIG SUL 19 NOTHENOTE! UNIVERSE BLVD

1A PLAN CONTINUES TO SUPPORT THE ROUGH GRADING PROPOSED FOR THE PORTABLE PHASE OF THE OVERALL SITE DEVELOPMENT ALONG WITHIN THE PAVING OF THAT PORTION

DRAINAGE PLAN PROVIDES AN OVERVIEW OF THE ANTICIPATED FULL BUILDOUT OF THE

SUBMITTALS WILL BE REQUIRED FOR PHASE 1B BUILDING PERMIT AND SO #19 APPROVALS, 2 BUILDING PERMIT.

2 BUILDING PERMIT.

2 BUILDING PERMIT.

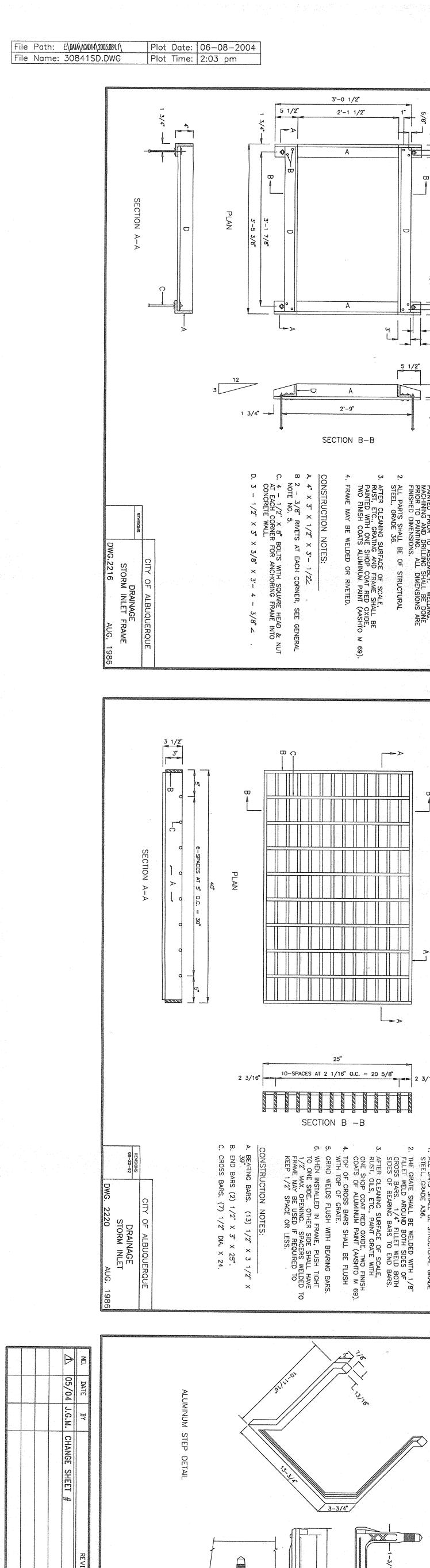
2 BUILDING PERMIT.

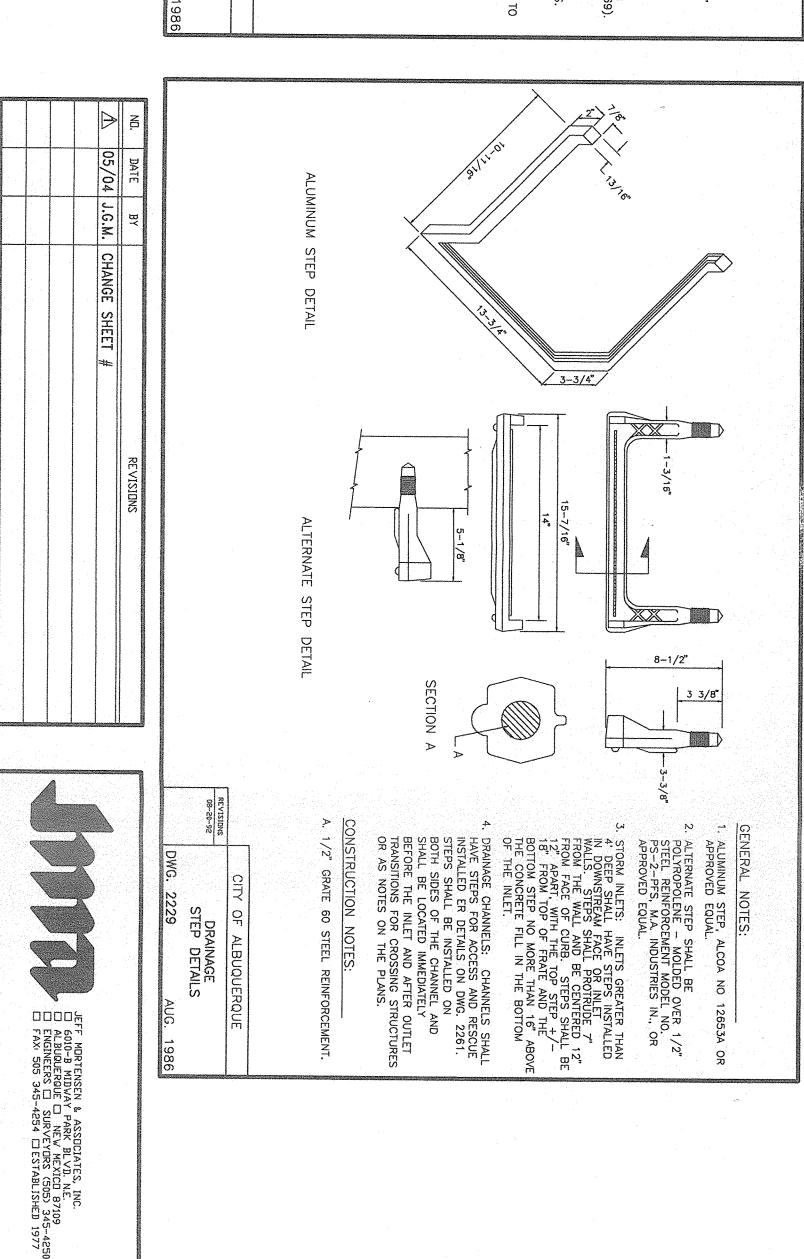
3 CHARGE OF THIS SITE WILL RESULT IN AN INCREASE IN THE DEVELOPED RUNOFF LEAVING THE MOST SIGNIFICANT INCREASE BEING NOTED IN BASIN E WHERE THE MAJORITY OF THE T IS CURRENTLY PROPOSED.

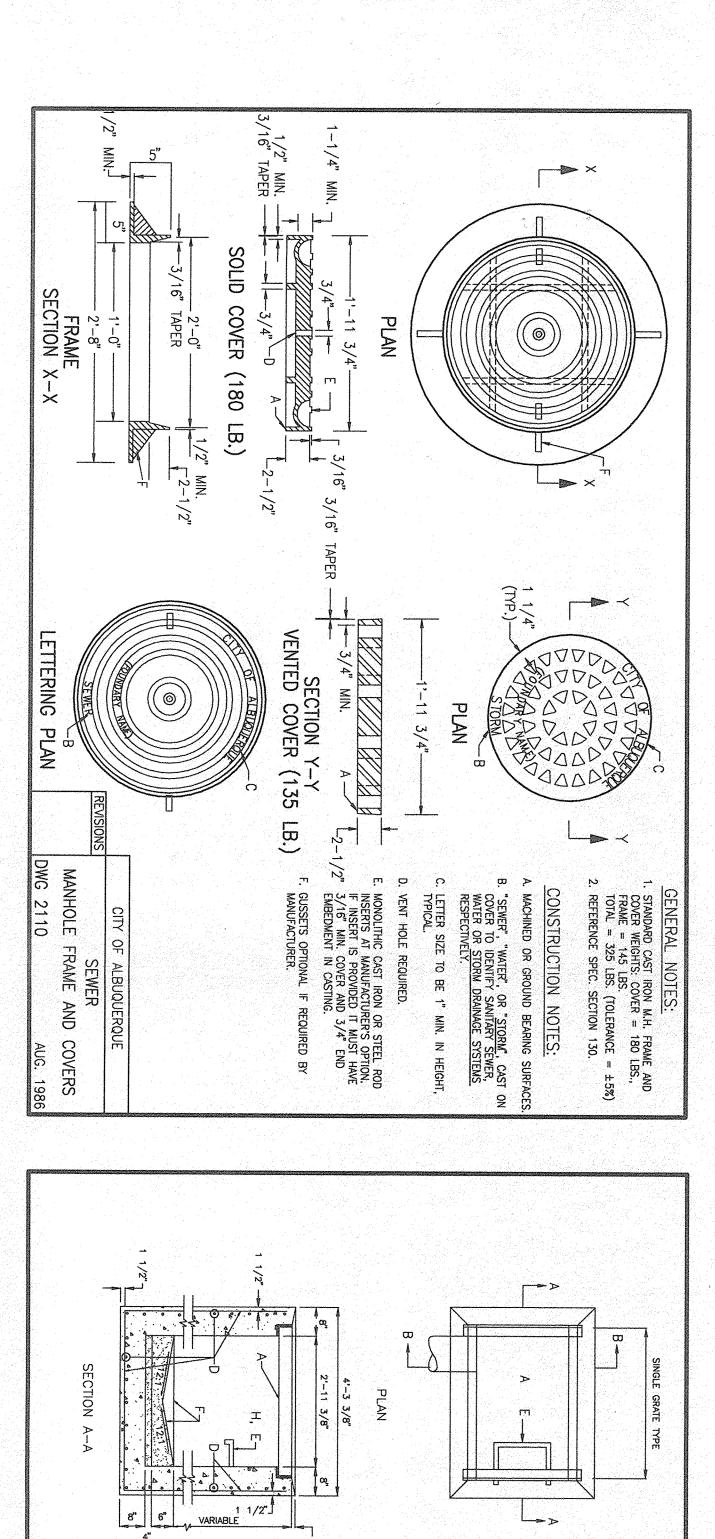
3 ISCHARGE OF RUNOFF FROM THIS SITE IS APPROPRIATE BASED UPON THE AVAILABILITY OF ISCHARGE OF RUNOFF FROM THIS SITE IS APPROPRIATE BASED UPON THE AVAILABILITY OF ISCHARGE OF RUNOFF FROM THIS SITE IS APPROPRIATE BASED UPON THE AVAILABILITY OF ISCHARGE OF VENTANA

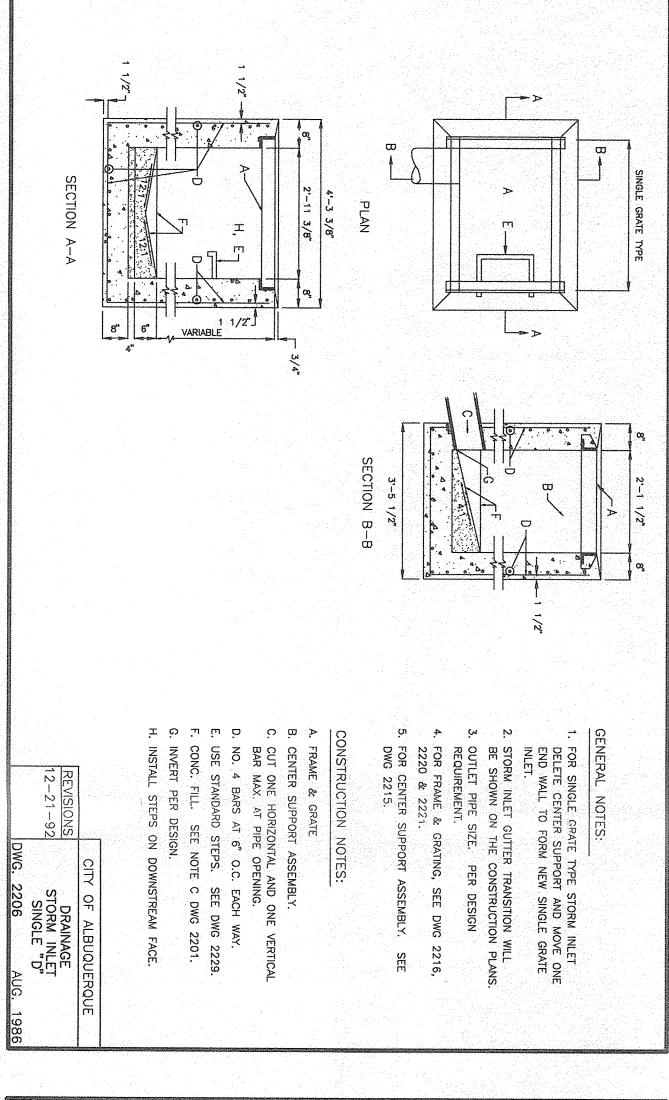


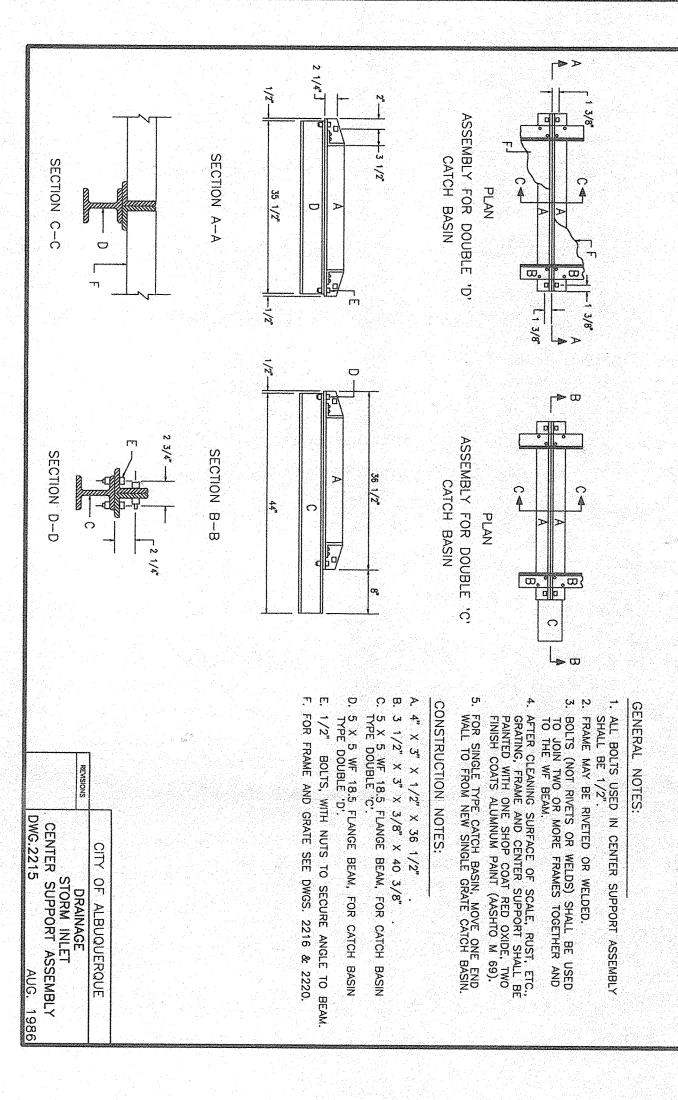


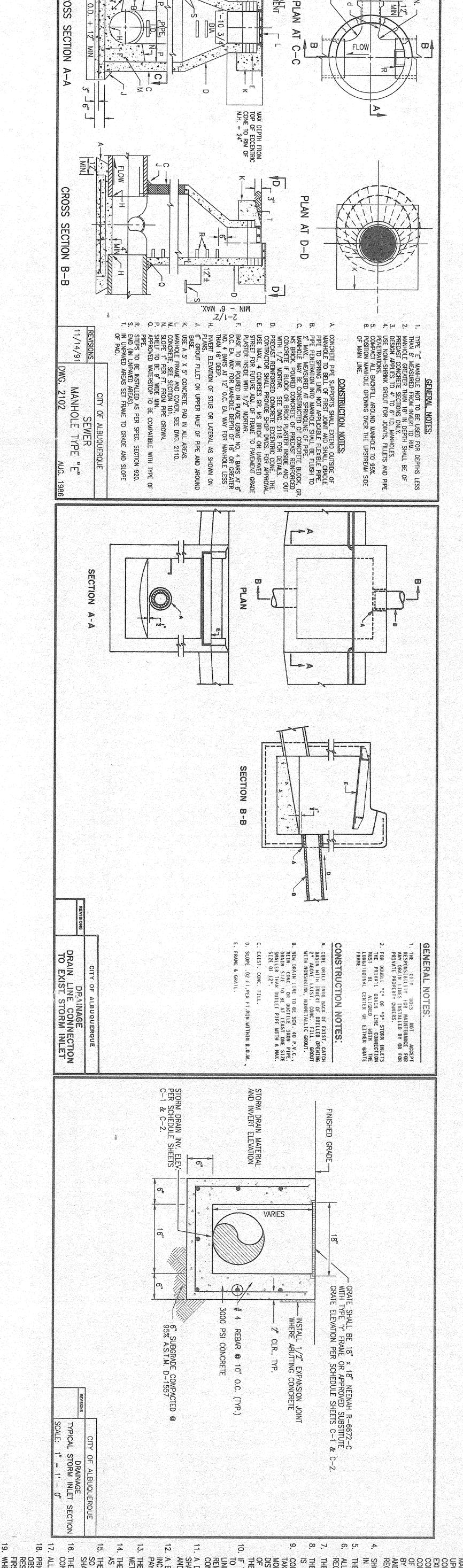


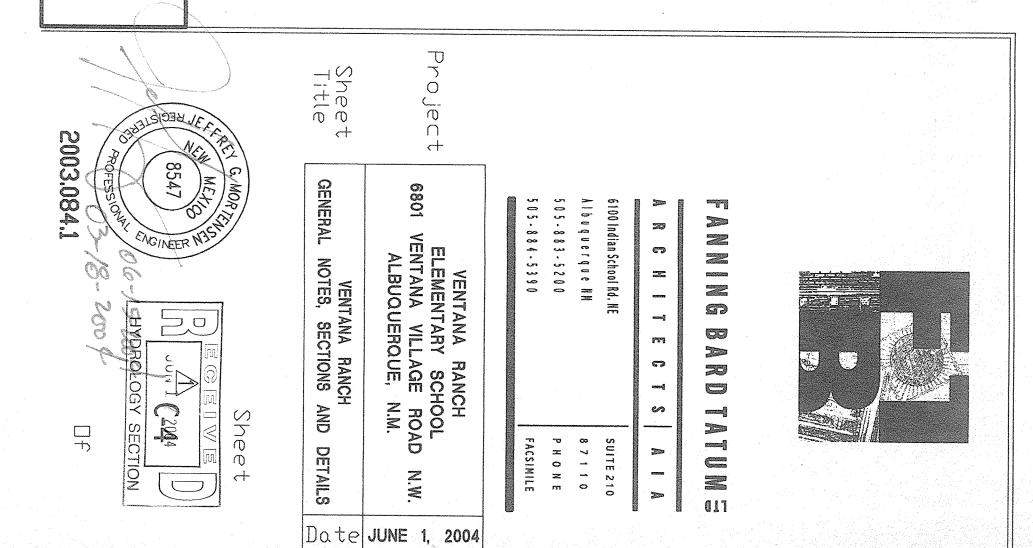












SIBLE FOR SAFELY OBTAINING THE REQUIRED COMPACTION. THE CONTRACTOR SHALL SELECT AND USE JRIOUS OR DAMAGING TO THE EXISTING FACILITIES AND STRUCTURES WHICH SURROUND THE WORK AREAS. S WORK WITHIN THE CONSTRUCTION LIMITS IN ORDER TO PRESERVE THE EXISTING IMPROVEMENTS AND SO ERATIONS OF THE EXISTING FACILITIES. MATERIAL (CONTAMINATED OR OTHERWISE), ASPHALTIC PAVING, CONCRETE PAVING, ETC.
MPLIANCE WITH APPLICABLE REGULATIONS. ALL COSTS INCURRED IN OBTAINING A DISPOSAL SITE
NCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT SHALL BE MADE.

OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE REGULATIONS. ALL COSTS
HAUL THERETO SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE STREET.

STHAN SEVEN (7) DAYS PRIOK IN CONTRACTOR STREET.

STHAN SEVEN (7) DAYS PRIOK IN CONTRACTOR STATE EXPENSE OF SURVEY MONUMENTS. CONTRACTOR THE EXPENSE OF SURVEY MONUMENTS. CONTRACTOR SHALL AT HIS OWN EXPENSE, ADJUST SOTHERWISE SPECIFIED.

SIDEWALK, AND/OR PAVING IS REQUIRED, THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST SIDEWALK, AND/OR PAVING IS REQUIRED, THE CONTRACTOR SHALL SAWCUT AND/OR REMOVE VEMENT TO EXISTING, THE CONTRACTOR SHALL CUT BACK THE EXISTING PAVING TO A STRAIGHT KED PAVEMENT. CURB AND GUTTER AND/OR PAVEMENT SHOWN AS EXISTING AND NOT TO BE SHOWN OR DISPLACED BY THE CONTRACTOR SHALL BE REMOVED AND REPLACED BY THE

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ASPHALTIC PAVING, CONCRETE PAVING, ETC.

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ASPHALTIC PAVING, CONCRETE PAVING, ETC.

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THE CONTRACTOR SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR SHALL BY THE ATE MEANS AND METHODS TO EXCAVATE AND TRENCH AND/OR INSTALL PIPE O AS NOT TO INTERFERE WITH OTHER UTILITIES OR IMPROVEMENTS. THIS IO SEPARATE PAYMENT WILL BE MADE.

TING AND REPLACING, IF DAMAGED, ALL UTILITIES ENCOUNTERED DURING ICTION, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.

RE SHOWN TO THE FACE OF CURB AND/OR WALL.

RIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE HALL BE RESPONSIBLE FOR ALL INTERPRETATIONS IT MAKES WITHOUT S PRIOR TO STARTING WORK IN ORDER THAT THE ENGINEER MAY NUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY THE ENGINEER AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE THE ENGINEER. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATION JMENT IS LOCATED, CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST TO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY.
THIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIA

ON, DEBRIS, AND OTHER DELETERIOUS MATERIALS.

VIMUM OF 95% ASTM D-1557 UNLESS A GREATER COMPACTION REQUIREMENT IS OTHERWISE SPECIFIED.

LUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE RESPONSIBILITY

TRENCHING AND SHORING ACTIVITIES MUST BE CARRIED-OUT IN ACCORDANCE WITH OSHA 29 CFR 1926,

MIT" FROM THE CITY AND/OR FILE A NOTICE OF INTENT (N.O.I.) WI

ARCT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE ARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986, UPDATE 7 CONTACT NEW MEXICO ONE CALL SYSTEM, 260—1990, (ALBUQUERQUE INFORMATION ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME MINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE ON UNDERGROUND UTILITY LINE IN OR NEAR THE AREA ONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED THING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING NOT EXTENDED THE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND ND FACILITIES. DITIONS, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE ENG DUNT OF DELAY FOR ALL PARTIES. G CONSTRUCTION. APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND NEER