

CITY OF ALBUQUERQUE



November 17, 2014

Eddy Losinski, PE
JEL & Associates, LLC
250 Bazan Loop
Corrales, NM 87048

**Re: Montezuma Elementary School
3100 Indian School Rd. NE
Request Permanent C.O. - Accepted
Engineer's Stamp dated: 4-8-14 (G13D023B)
Certification dated: 10-10-14**

Dear Mr. Losinski,

Based on the Certification received 11/17/2014, the site is acceptable for release of Certificate of Occupancy by Hydrology.

If you have any questions, you can contact me at 924-3695 or Rudy Rael at 924-3977.

PO Box 1293

Albuquerque

New Mexico 87103

Sincerely,

Curtis Cherne, P.E.
Principal Engineer, Planning Dept.
Development and Review Services

www.cabq.gov

C: RR/CC
email

MONTESUMA ELEMENTARY SCHOOL
3100 INDIAN SCHOOL NE, ALBUQUERQUE, NM 87106
GRADING & DRAINAGE PLAN, AND
POST DEVELOPMENT BASIN PLAN
TURF PLAY FIELD ADDITION

REVISIONS

DRAWN BY: T.D.S.
DESIGNED BY: E.J.L.
CHECKED BY: E.J.L.
DATE: 4/14

WESTWIND LANDSCAPE
CONSTRUCTION INC.
2739 VASSAR PLACE, NE
ALBUQUERQUE, NM 87107
PHONE: 505-881-8925
FAX: 505-883-7052

C-101

WESTWIND LANDSCAPE
CONSTRUCTION INC.

DRAINAGE PLAN

Site Location: As shown by the vicinity map 1-16-2, the 1.52-acre site is located at 3100 Indian School Rd. NE, Albuquerque, NM 87106 in the northeast quarter area of Albuquerque/Bernalillo County.

Legal Description: Public Tract within Township 10 North, Range 3 East Section 15, Bernalillo County, New Mexico. The property shown on this plan is given for information only to describe the project limits. Property information shown hereon does not constitute a boundary survey. The area of the tract proposed to be impacted by the addition of the artificial turf field is approximately 1.85 acres. The total acreage of the parcel is 8.96 acres.

Survey: The survey of topography was prepared by the firm of Jeff Mortenson and Associates in and compiled from field measurements taken in February 1996. The benchmark for this survey is based on several City of Albuquerque Control Station brass caps. Based on a review of the site the removal of the portable buildings resulted in minimal boundary change to the surrounding grades. This area is well established along all of its boundaries as it lies into existing streets and private property fences.

Flood Zone: As shown by Panel 351 of 825, Map Number 35001C0351H, Dated August 16, 2012 of the National Flood Insurance Program, Flood Hazard and Floodway Maps for the City of Albuquerque, New Mexico, this site lies outside the 100-year storm frequency event. Adjoining property is protected from the 1% annual event via storm drains that contain the collected storm water and discharge it to the 1.25 diversion channel.

Hydrologic Methods: The calculation attached analyze developed conditions for the 100-year, 6-hour and 100-year 10-day rainfall events. The process outlined in the DPM, Section 22.2 for Zone 2 was used to quantify the peak flow rates and volumes. As shown by these calculations, the proposed condition versus the existing condition generates 1.07-cfs less storm water flow and 3.268 cubic feet less volume for this site. This is due to the fact that the installation method of the artificial turf traps water similar to a soil type "B" instead of the soil type "C" that is presently on the site.

Existing Conditions: Offsite runoff does not impact the site based on either field observation or topographic measurement. Adjacent runoff on the east is contained within the residential property boundary. In addition, a solid block wall that runs the entire length of the easterly property boundary. All other offsite flows are contained within the streets located on the south, west and north. The Basins identified on this map are for the area impacted by the project. Basins 1-3 are for the Pre-Development Condition and Basins A-C represent the Post-Development condition. Basin 1 and Basin A remain unchanged from pre-development to Post-Development condition. Basins 2 and 3 convey flow to the north via sheet flow or inlet located within the play area. Basins 2 and 3 convey flow to the north via sheet flow or within a shallow swale located along the easterly property boundary. All of the flow, either sheet or channel, is discharged into the main parking lot located in front of the school on the north side. Flows from the parking lot discharge directly into Indian School Road where they are conveyed to the east and into the existing storm drain system.

Proposed Conditions: Albuquerque Public Schools proposes to install a 162' by 144' artificial turf play field as shown on the drawing. In addition, a sidewalk will surround the field and a concrete sidewalk and pad will be installed to provide ADA access to the field. Significant site landscaping will be installed to provide shade on three sides of the field, specifically the south, east and west. No change in discharge location will occur as a result of this drainage plan and the proposed improvements other than the reduction in storm water runoff previously noted.

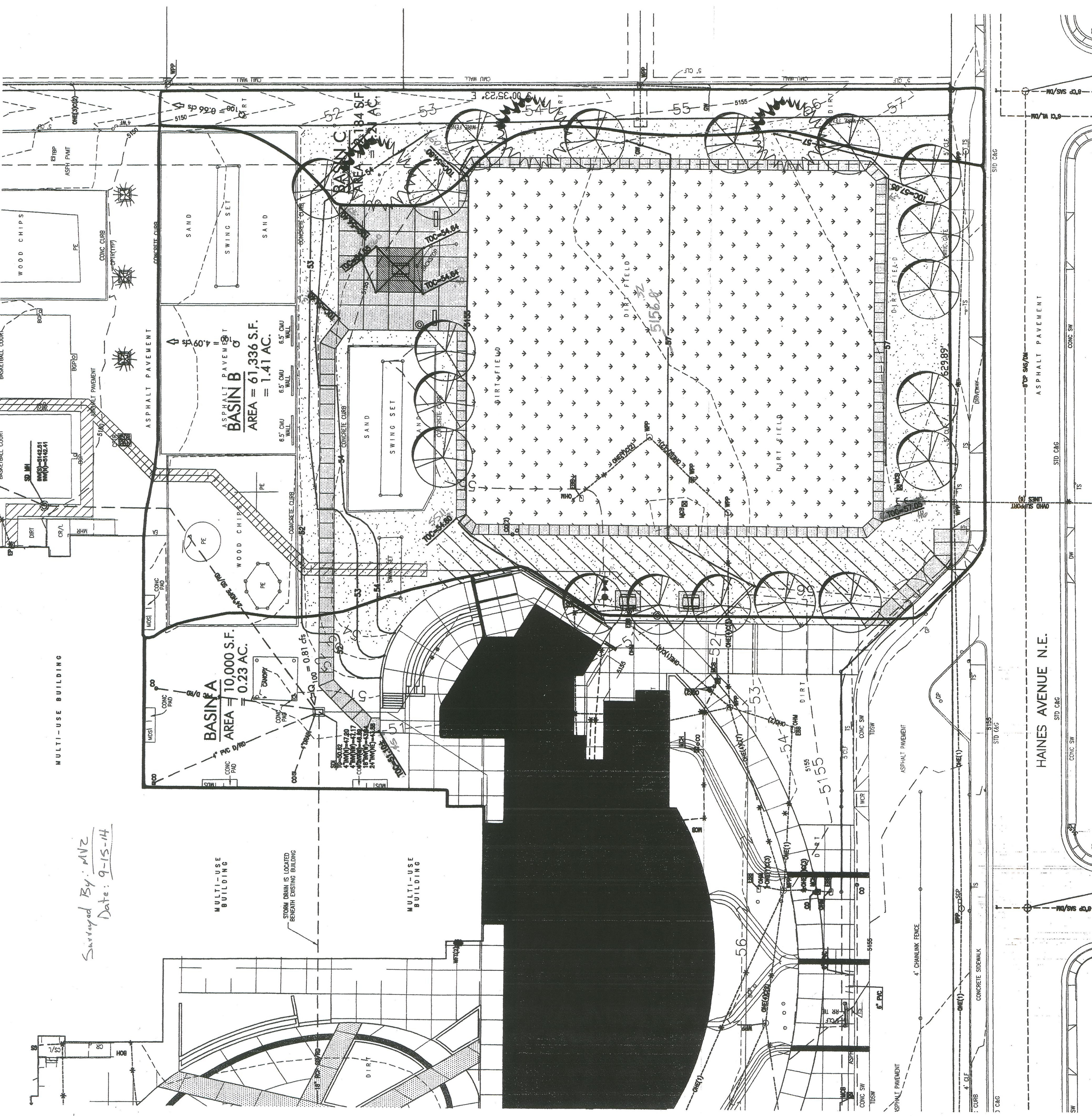
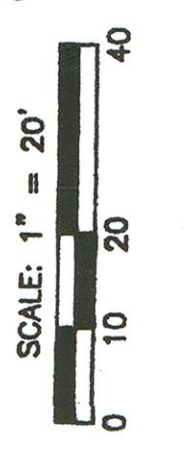
Erosion Control Measures/SWPPP/BMPs: The contractor shall ensure that no soil erodes from the site into public right-of-way or onto private property. This can be achieved by constructing temporary silt fences at the property lines and wetting soil to keep it from blowing. A copy of the BMP for protection of the site is being submitted by others and shall be fully implemented during the time of construction. The contractor shall promptly clean up any material excavated so that the excavated material is not exposed to being washed down gradient. A SWPPP is anticipated under this section and is being prepared for submission and review by others. The contractor shall secure a Topsoil Disturbance Permit prior to beginning construction.

CHANNEL CONVEYING FLOW FROM BASIN 3/C TO PARKING LOT ACTUAL FLOW = 1.04 cfs				
SOLVE FOR FLOW IN A TRAPEZOIDAL CHANNEL WITH KNOWN DEPTH				
DEPTH	TOP WIDTH	BOTTOM WIDTH	CHANNEL SLOPE	FEET
1.00	6.00	1.00	2.00%	FEET
CALCULATED FLOW CAPACITY				64.9
				CFS

DRAINAGE CERTIFICATION
I, EDWARD J. LOSINSKI, NMPE 11376, OF THE FIRM JEL & ASSOCIATES, LLC, HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED APRIL 18, 2014. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY MR. CHARLES CALA, NMPLS 11184, OF JEFF MORTENSON AND ASSOCIATES. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON OCTOBER 9, 2014 AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF FINAL PROJECT CLOSEOUT.

THE RECORD INFORMATION REPRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS 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.

EDWARD J. LOSINSKI, NMPE 11376
10/14/14
DATE



Surveyed By: MNZ
Date: 9-15-14

CITY OF ALBUQUERQUE



April 30, 2014

Eddy Losinski, P.E.
JEL & Associates, LLC
250 Bazan Loop
Corrales, New Mexico 87048

**RE: Montezuma Elementary Play Field
Grading and Drainage Plan
Engineers Stamp Date 4/18/14 (J16D009)**

Dear Mr. Losinski,

Based upon the information provided in your submittal received 4/21/14, the above referenced Grading and Drainage Plan (G&D) is acceptable for Building Permit and Paving Permit. Hydrology is requesting that proposed landscape areas be depressed to retain/infiltrate the rain that falls on them and if possible have existing flows, flow through the landscape areas for water harvesting and water quality.

This project requires a National Pollutant Discharge Elimination System (NPDES) permit for storm water discharge and a Topsoil Disturbance Permit since it is disturbing $\frac{3}{4}$ of an acre or more.

Before building permit approval, an Erosion and Sediment Control Plan (ESC) must be submitted and accepted. Attach a copy of the ESC plan and this approved G&D plan to each of the Building Permit sets prior to seeking approval by the Hydrology section.

If you have any questions, please contact me at 924-3695 or Rudy Rael at 924-3977.

Sincerely,

Rita Harmon, P.E.
Senior Engineer, Hydrology
Planning Department

RR/RH
C: File