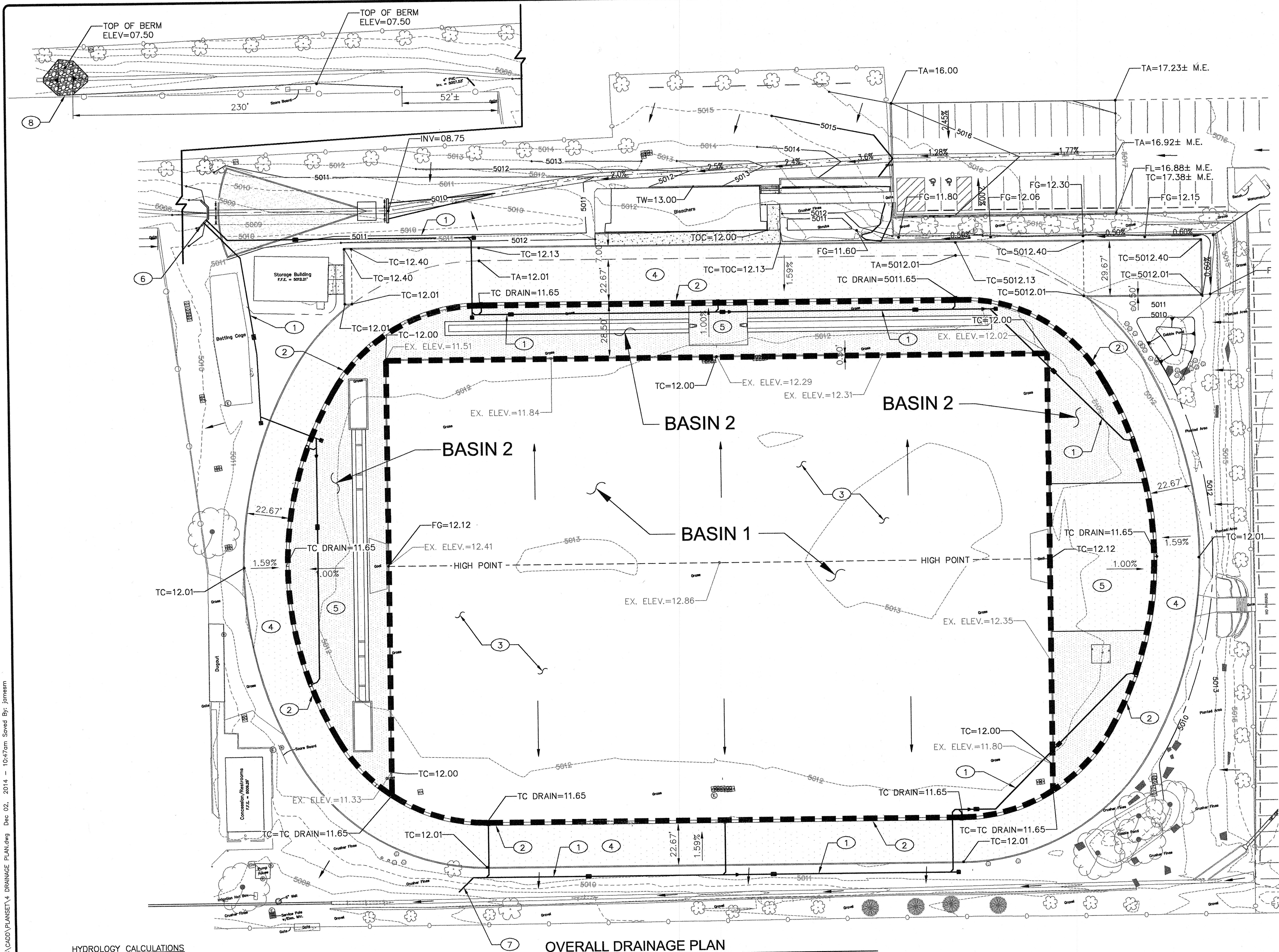


D:\SEC\PROJECTS\114653 Sandia Preparatory School\ENGINEERING\GDD\PLANSET\4 DRAINAGE PLAN.dwg Dec 02, 2014 10:47am Saved By: jmaesam



HYDROLOGY CALCULATIONS

Project Description:

Hydrology: The tables and figure referenced in this analysis are taken from Chapter 22 of the City of Albuquerque (COA) Design Process Manual (DPM).

This project is the reconstruction of the Sandia Preparatory School (sps) running track. The track is currently paved with a rubberized surfacing material. The entire existing infield within the track oval is grass. The changes in the land use will only occur on the existing soccer field contained within the inner perimeter of the track. Part of the existing soccer track will be paved to allow for additional areas for track events including pole vault, high jump and long jump. This will involve changing a portion of the land use of the soccer field from "B" to "D". While this project includes regrading of areas outside the track to improve drainage patterns, these area land uses will not change. Therefore, all runoff outside the inner perimeter of the track will remain the same as current patterns, the increase in "D" land use within the soccer field will result in an increase in runoff from this area. The runoff from the modified soccer field will result in an increase in runoff from this area. The runoff from the modified soccer field will be collected in a trench drain along the inner perimeter of the track and will be conveyed to discharge points outside the track using a storm drain system. The north side will have two discharge lines and the south side will have one discharge line. As a result of topography, the north side of the site allows for better ponding than the south side of the site. Therefore, a pond area will be constructed along the north side of the site. This will be accomplished by base ball field in an existing drainage swale to collect the initial 0.44 inches of runoff from the added "D" area. This will be accomplished by the construction of a berm between the baseball field and the property line on the north allowing for infiltration of the initial 0.44 inches of runoff. The initial volume of runoff will result in a required pond volume of 1,102 cubic feet. All other runoff will be allowed to flow through historic paths and at historic rates.

OVERALL DRAINAGE PLAN

SCALE: 1"=30'

	LAND USE AND ACREAGE			
	A	B	C	D
INFIELD, EXISTING CONDITIONS	0	2.73	0	0
INFIELD, DEVELOPED CONDITIONS	0	2.06	0	0.69

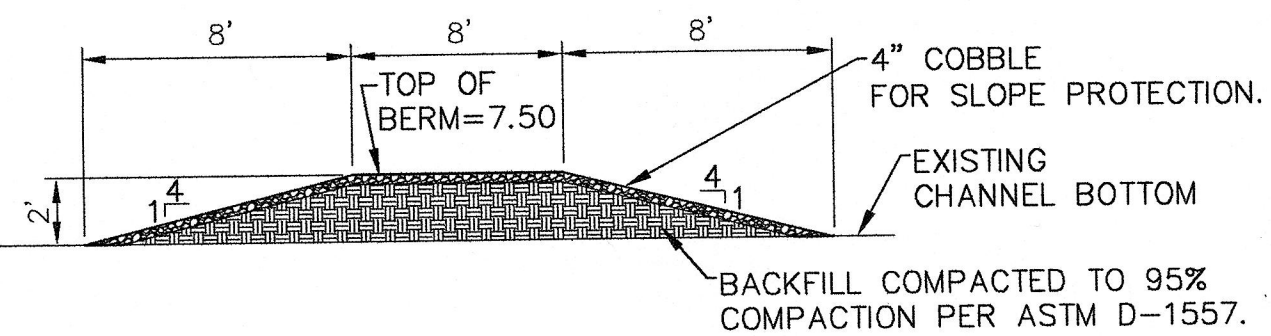
	RUNOFF, CFS/ACRE				TOTAL RUNOFF, CFS	INCREASE IN RUNOFF, CFS
	A	B	C	D		
INFIELD, EXISTING CONDITIONS	0	6.22	0	0	6.22	
INFIELD, DEVELOPED CONDITIONS	0	4.65	0	3.20	7.89	1.67

FIRST FLUSH RUNOFF CALCULATED FOR DIFFERENCE IN LAND USE

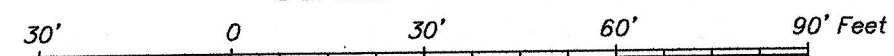
TOTAL INCREASE OF TYPE "D" AREA, SF	30,056
VOLUME OF RUNOFF FOR 0.44 INCHES RAINFALL, FT ³	1,102

PONDING BERM DETAIL

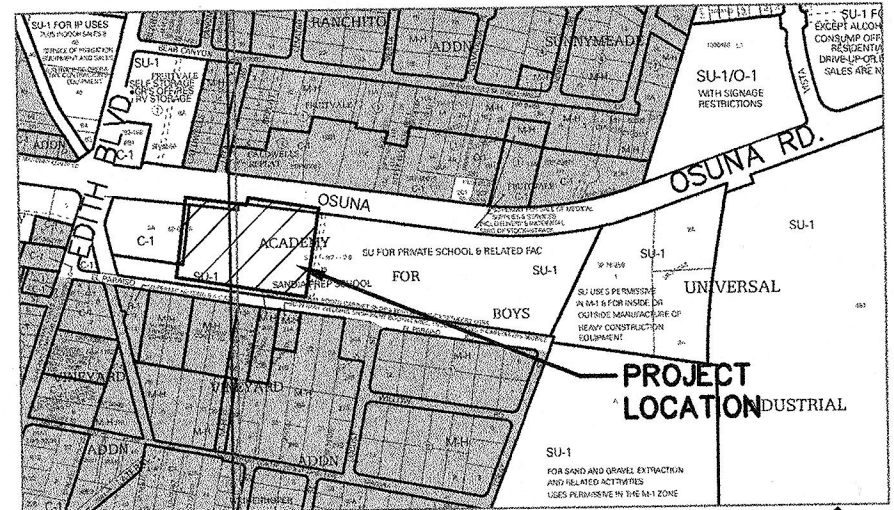
SCALE: NONE



SCALE: 1" = 30'



VICINITY MAP



ZONE ATLAS PAGES E-15/E-16

532 OSUNA RD NE
Lots: 2A AND 2B - SANDIA PREP SCHOOL
Block: 0000
Subdivision: ACADEMY FOR BOYS

ZONING

LOT 2A
Designation: C-1
Category: COMMERCIAL
Land Use Classification: 2000

LOT 2B
Designation: SU-1
Category: INSTITUTIONAL/GOVERNMENT
Land Use Classification: 7100

GENERAL NOTES

1. ALL SPOT ELEVATIONS ARE PLUS 5000 FEET.

KEYED NOTES:

- NEW DRAIN PIPE FOR TRACK DRAIN.
- NEW TRACK TRENCH DRAIN SYSTEM.
- EXISTING SOCCER FIELD.
- RECONSTRUCTED TRACK.
- NEW PAVED "D" AREAS AND POLE VAULT AREAS.
- DISCHARGE POINT FOR TRACK DRAIN ON NORTH.
- DISCHARGE POINT FOR TRACK DRAIN ON SOUTH.
- CONSTRUCT NEW PONDING BERM. SEE DETAIL THIS SHEET.

LEGEND

TC	TOP OF CURB
TC DRAIN	TRENCH DRAIN TOP OF CURB
TA	TOP OF ASPHALT
FG	FINISHED GRADE



SANDIA PREPARATORY SCHOOL
ALBUQUERQUE, NEW MEXICO

SANDIA PREPARATORY SCHOOL
HIGH SCHOOL TRACK RECONSTRUCTION

DRAINAGE PLAN

SOLUTIONS FOR TODAY...
VISION FOR TOMORROW

2201 San Pedro Dr. NE
Building 4, Suite 200
Albuquerque, NM 87110
Phone: (505) 884-0700
Fax: (505) 884-2376

TEXAS



JOB NO:
114653

DATE:
12/02/2014

SHEET
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