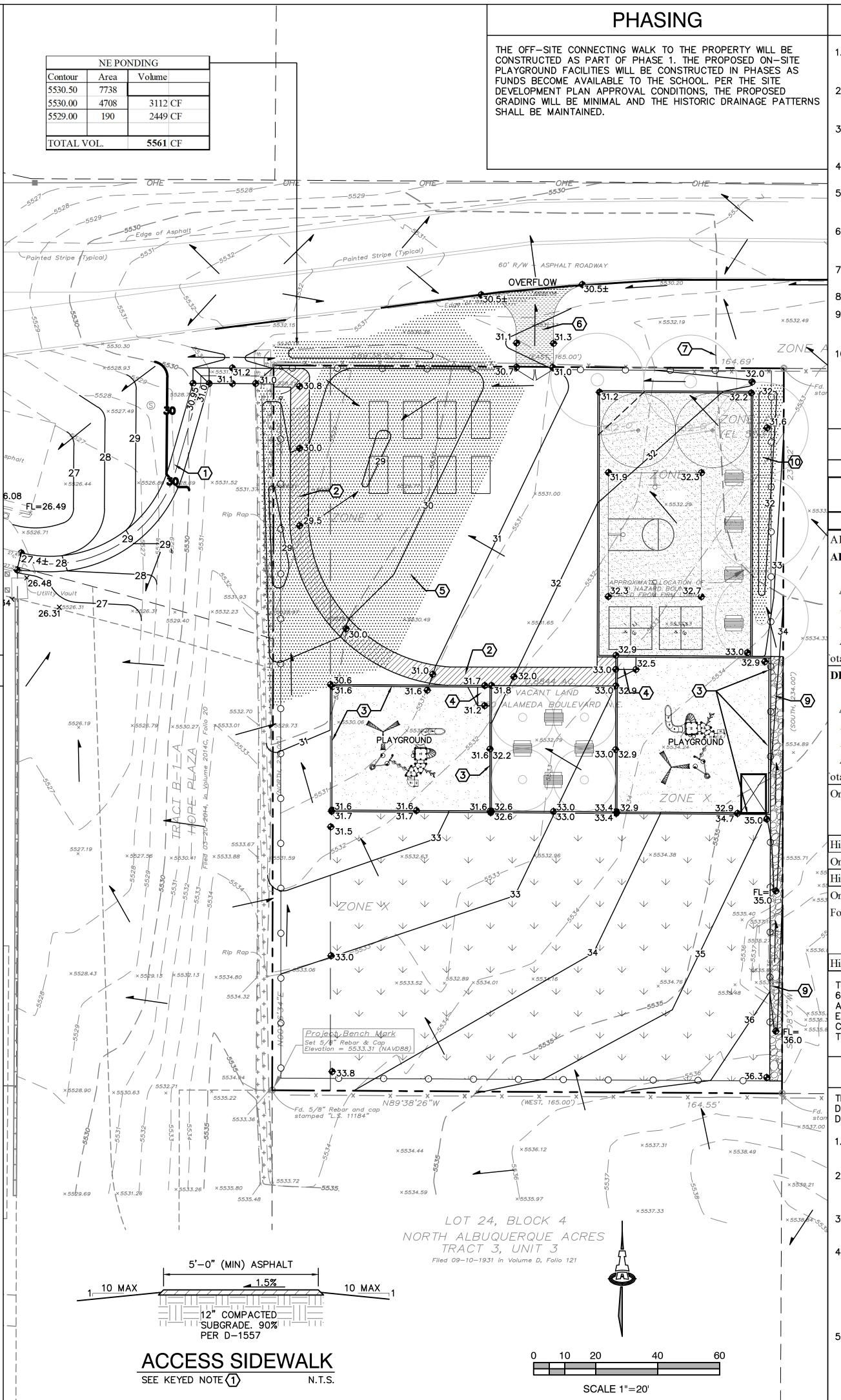


- A. ALL WORK DETAILED ON THESE PLANS AND PERFORMED UNDER THIS CONTRACT SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARDS.
- B. THE CONTRACTOR SHALL ABIDE BY ALL STATE, LOCAL, AND FEDERAL LAWS. CODES, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS, INCLUDING EPA AND ADA REQUIREMENTS.
- C. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS FOR THE PROJECT PRIOR TO COMMENCING CONSTRUCTION.
- D. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING OBSTRUCTIONS, AND CONDITION OF ALL EXISTING INFRASTRUCTURE PRIOR TO CONSTRUCTION. REPORT ALL DISCREPANCIES TO THE ARCHITECT AND VERIFY THE ARCHITECT INTENT BEFORE PROCEEDING.
- E. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE SAFETY.
- F. CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS. ANY DAMAGE TO ADJACENT STRUCTURES RESULTING FROM THE CONSTRUCTION PROCESS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
- G. ALL TRASH, DEBRIS, & SURFACE VEGETATION SHALL BE CLEARED AND LEGALLY DISPOSED OF OFFSITE.
- H. PROPOSED SPOT AND CONTOUR ELEVATIONS SHOWN REPRESENT TOP OF FINISH MATERIAL (I.E. TOP OF CONCRETE, TOP OF CONCRETE BUILDING PAD, TOP OF PAVEMENT MATERIAL, TOP OF LANDSCAPING MATERIAL, ETC.). CONTRACTOR SHALL GRADE, COMPACT SUBGRADE AND DETERMINE EARTHWORK ESTIMATES BASED ON ELEVATIONS SHOWN MINUS FINISH MATERIAL THICKNESSES.
- EXISTING UTILITY LINES ARE SHOWN IN AN APPROXIMATE MANNER ONLY AND MAY BE INCOMPLETE OR OBSOLETE. SUCH LINES MAY OR MAY NOT EXIST WHERE SHOWN OR NOT SHOWN. CONTRACTOR SHALL CONTACT NM-811 FOR UTILITY LINE SPOTS TWO WORKING DAYS PRIOR TO CONDUCTING SITE FIELD WORK. CONTRACTOR SHALL FIELD VERIFY AND LOCATE ALL UTILITIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. 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. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF NECESSARY DRY UTILITY ADJUSTMENTS.
- J. CONTRACTOR SHALL PROVIDE ALL OTHER CONSTRUCTION STAKING. CONTRACTOR SHALL LOCATE AND PRESERVE ALL BOUNDARY CORNERS AND REPLACE ANY LOST OR DISTURBED CORNERS AT CONTRACTOR'S SOLE EXPENSE. PROPERTY CORNERS SHALL ONLY BE RESET BY A REGISTERED LAND SURVEYOR.
- K. ADJUST ANY RIMS OF EXISTING UTILITY FEATURES AS NECESSARY TO MATCH NEW GRADES. UTILITIES IN PAVED AREAS SHALL BE HS-25 TRAFFIC RATED.
- WHERE GRADES BETWEEN NEW AND EXISTING ARE SHOWN AS 'MATCH' OR '±'. TRANSITIONS SHALL BE SMOOTH.
- M. ENGINEER RECOMMENDS THAT OWNER MAINTAIN EROSION PROTECTION ELEMENTS. ENGINEER RECOMMENDS THAT OWNER INSPECT SITE YEARLY AND AFTER EACH RAINFALL TO IDENTIFY NEW AREAS OF EROSION AND INSTALL ADDITIONAL EROSION PROTECTION AS NEEDED BASED ON ACTUAL OCCURRENCES.
- N. MEASURES REQUIRED FOR EROSION AND SEDIMENT CONTROL SHALL BE INCIDENTAL TO THE PROJECT COST.

ADJACENT PUBLIC RIGHT-OF-WAY.

O. IF THE SITE IS SMALL ENOUGH NOT TO REQUIRE A SWPPP/NPDES PERMIT (LESS THAN ONE ACRE), THE CONTRACTOR SHALL STILL BE RESPONSIBLE FOR USING EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMP'S) TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO



#### **KEYED NOTES**

- CONSTRUCT 5' WIDE ASPHALT (2" THICK) ACCESS SIDEWALK AT ELEVATIONS SHOWN (SLOPE =  $4.5\%\pm$ ). GRADE TO EXISTING AT 1:10 SLOPE.
- CONSTRUCT ADA ACCESSIBLE PATH AT ELEVATIONS SHOWN TO ACHIEVE GRADE TRANSITION. SEE SITE DEVELOPMENT PLAN (SHEET LS-101).
- CONSTRUCT CONCRETE HEADER CURB AROUND PLAYGROUND AREAS. TOP OF LEVEL PLAYGROUND AND TOP OF VARYING EXTERIOR LANDSCAPING ELEVATIONS SHOWN AT CORNERS.
- CONSTRUCT ADA ACCESS RAMP INTO PLAYGROUND. MAX. 1:12 SLOPE.
- HATCHED AREA REPRESENTS EXTENTS OF ON-SITE PONDING LIMITS. OVERFLOW ELEVATION ACROSS ALAMEDA BLVD. =  $5530.5\pm$ . POND LOWPOINT = 5529.0. MAX. DEPTH = 18".

CONSTRUCT MAINTENANCE ACCESS DRIVE AT ELEVATIONS

- SHOWN. MATCH TOP OF EXISTING ALAMEDA BLVD. ASPHALT PAVEMENT. SEE SITE DEVELOPMENT PLAN (SHEET LS-101).
- EXISTING FEMA FLOOD HAZARD ZONE AE BOUNDARY. SEE FLOOD HAZARD IN PROJECT DATA THIS SHEET.
- NOT USED
- CONSTRUCT SHALLOW SWALE (6" AVG. DIA. FRACTURED FACE ROCK, GROUTED ROCK, OR CONCRETE - OWNER'S OPTION) ALONG EAST EDGE TO DIVERT OFF-SITE FLOW NORTH.
- 10. DEPRESS LANDSCAPING 6" FOR WATER HARVESTING.

# **CALCULATIONS**

#### **CALCULATIONS:**

Based on Drainage Design Criteria for City of Albuquerque Section 22.2, DPM, Vol 2, dated Jan., 1993

ON-SITE CALCULATIONS: 100-YEAR, 6-HOUR STORM

AREA OF SITE: **ALLOWABLENAA FLOWS:** 

		Treatment S %	
Area A	=	16563.6	43%
Area B	=	7704	20%
Area C	=	7704	20%
Area D	=	6548.4	17%
tal Area	=	38520	100%

#### DEVELOPED FLOWS:

		Treatment Sl %		EXCESS PRECIP:		
Area A	=	7704	20%	Precip. Zone 4		
Area B	=	15408	40%	$E_A = 0.80$		
Area C	=	9630	25%	$E_{\rm B}=1.08$		
Area D	=	5778	15%	$E_{\rm C} = 1.46$		
otal Area	=	38520	100%	$E_{\rm D} = 2.64$		

On-Site Weighted Excess Precipitation (100-Year, 6-Hour Storm)

	Weighted E=		$E_AA_A + E_BA_B + E_CA_C + E_DA_D$			
				$A_A + A_B +$	A <sub>C</sub> +	$+A_{\mathrm{D}}$
	Historic	=	1.30 in.	Developed E	=	1.35 in.
	On-Site Volu	ıme of F	Runoff: V360 =	E*A / 12		
5	Historic V	=	4176 CF	Developed V <sub>36</sub>	=	4343 CF
3	On-Site Peal	k Discha	$arge Rate: Qp = Q_{pA}$	$A_A+Q_{pB}A_B+Q_{pC}A_{pC}$	$A_C+C$	Q <sub>pD</sub> A <sub>D</sub> / 43,56

For Precipitation Zo 4

$Q_{pA}$	=	2.20			$Q_{pC}$	=	3.73
QрВ	=	2.92			$Q_{pD}$	=	5.25
Historic ζ	=		2.8	CFS	Developed Qp	=	2.9 CF

THE ON-SITE PONDING WILL CONTINUE TO RETAIN THE 100-YEAR 6 HOUR STORM FOR INFILTRATION WHILE PROVIDING AN ADDITIONAL 1200± CF FOR LARGER AND BACK-TO-BACK STORM EVENTS. STORM WATER FLOW IN EXCESS OF POND CAPACITY WILL CONTINUE TO OVERFLOW ALAMEDA BLVD. AND CONTINUE ALONG THE HISTORIC DRAINAGE PATH.

#### SITE DEVELOPMENT PLAN NOTES

THIS PLAN IS IN COMPLIANCE WITH THE APPROVED SITE DEVELOPMENT PLAN WHICH INCLUDES THE FOLLOWING GRADING AND DRAINAGE DIRECTIONS:

- SITE GRADING SHALL BE MINIMAL TO LEVEL AREAS FOR PLAYGROUND DEVELOPMENT AND ADA ACCESSIBILITY.
- ALL GRADING WILL BE ACCOMPLISHED IN CUT ONLY (NO FILL). ALL CUT MATERIALS SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF OFF-SITE AS REQUIRED.
- THE HISTORIC DRAINAGE PATTERN FOR THE SITE SHALL BE MAINTAINED.
- 4. THE PROPERTY OWNER ACKNOWLEDGES THAT DURING AND AFTER STORM EVENTS PONDING OR STANDING WATER MAY OCCUR ON THE SITE. THERE MAY BE LOSS OF USE ON THE PLAYGROUND AS A RESULT OF THESE EVENTS. THE PROPERTY OWNER WILL FOLLOW APPROPRIATE PROCEDURES TO ENSURE THE SAFETY OF STUDENTS DURING AND AFTER THESE STORM EVENTS.
- THE PROPERTY OWNER ACKNOWLEDGES THAT THE PROPOSED PLAYGROUND IMPROVEMENTS ARE TEMPORARY AND MAY BE RELOCATED AT THE OWNER'S EXPENSE IF REQUIRED FOR ROADWAY AND OTHER INFRASTRUCTURE IMPROVEMENTS. PERMANENT STRUCTURES ARE NOT PERMITTED ON THE PROPERTY.

# **VICINITY MAP 高SIT** 1"=750'± LE SCHOOL C-20-Z

#### PROJECT DATA

PROPERTY: THE SITE IS AN UNDEVELOPED PROPERTY LOCATED WITHIN C.O.A. VICINITY MAP C-20. THE SITE IS BOUND TO THE NORTH BY ALAMEDA BLVD., TO THE WEST BY HOPE PLAZA OFFICE COMPLEX, AND TO THE SOUTH AND EAST BY UNDEVELOPED

SITE AREA: 0.8844 ACRES

PROPOSED IMPROVEMENTS: THE PROPOSED IMPROVEMENTS ARE TEMPORARY AND INCLUDE A TURF FIELD, PLAYGROUNDS, BALL COURTS, AND LANDSCAPING.

LEGAL: LOT 9, BLOCK 4, TRACT 3, UNIT 3, NORTH ALBUQUERQUE

BENCHMARK: VERTICAL DATUM IS BASED ON THE ALBUQUERQUE CONTROL SURVEY BENCHMARK "6-C21" HAVING A PUBLISHED ELEVATION OF 5660.507' (NAVD 1988).

OFF-SITE: THE PROPOSED PARK IS A TEMPORARY FACILITY. MINOR GRADING AND PLAYGROUND IMPROVEMENTS WILL BE CONSTRUCTED AT APPROXIMATELY EXISTING GRADES. HISTORIC OFFSITE FLOW WILL CONTINUE TO PASS INTO AND THROUGH THIS PROPERTY. SEE SITE DEVELOPMENT PLAN NOTES THIS SHEET.

FLOOD HAZARD: PER BERNALILLO COUNTY FIRM MAP, A SMALL NORTHEASTERLY PORTION OF THE SURVEYED PROPERTY LIES WITHIN FLOOD ZONE "AE" - ELEVATION 5531 (NAVD88), (SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD). THE REMAINDER OF THE PROPERTY LIES WITHIN FLOOD ZONE "X", (AREAS DETERMINED TO BE OUTSIDE 0.2% ANNUAL CHANCE FLOODPLAIN), IN ACCORDANCE WITH LETTER OF MAP REVISION ISSUED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, CASE NUMBER 11-06-2877P, WITH AN EFFECTIVE DATE OF NOVEMBER 8, 2012.

DRAINAGE PLAN CONCEPT: EXISTING FLOW PATTERNS WILL NOT BE ALTERED EXCEPT AS FOLLOWS:

- A TRANSITION SLOPE GRADING WILL PROVIDE AN ADA
- COMPLIANT ACCESS AT THE NORTHWEST END. • MINOR SLOPE ADJUSTMENTS TO ESTABLISH A UNIFORM TURF FIELD PLAYING FIELD.
- MINOR SWALES TO DEFLECT STORMWATER AROUND PLAYGROUNDS.

AMOUNT FROM THE UNDEVELOPED CONDITION.

 ALL STORMWATER CONTINUES TO DRAIN TO THE NORTHWEST TO ENTER THE EXISTING RETENTION POND AREA. DUE TO THE PROPOSED TURF AND CRUSHER FINES AND THE MINIMAL IMPERMEABLE PAVEMENT, THE PROPOSED DISCHARGE FROM THE DEVELOPED PROPERTY WILL INCREASE A MINOR

**ENGINEER:** ISAACSON & ARFMAN, PA 128 MONROE NE 87111 505-268-8828

RUSS P. HUGG, NMPS #9750 SURVEYOR:

> SURV-TEK, INC. 9384 VALLEY VIEW DRIVE N.W. ALBUQ., NM 87114

### LEGEND

EXISTING CONTOUR (1' INCREMENTS) \_ \_ \_ \_ \_ \_ FLOW DIRECTION — PROPOSED CONTOUR (1' INCREMENTS)

128 Monroe Street N.E.

PROPOSED SPOT ELEVATION 33.0 🗢



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> NM International School Playground

## **GRADING & DRAINAGE PLAN**

Date:	No.	Revision:	Date:	Job No.
10/31/14				20.67
Drawn By:				
BJB				CG-101
DŲD				
Ckd By:				GU 0E
FCA				SH. OF

