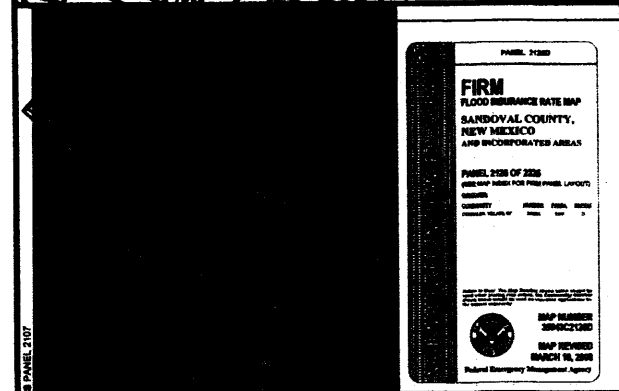
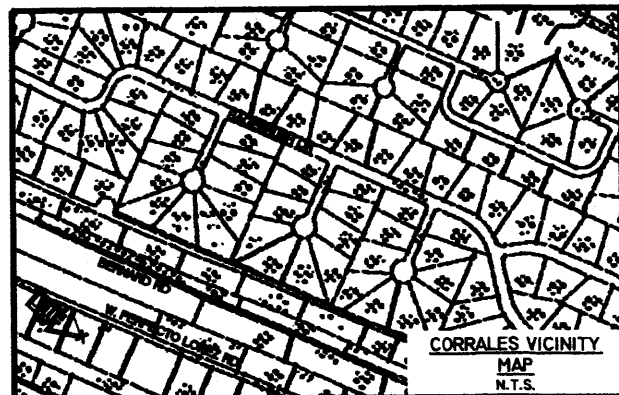


COMMUNITY SCIENCES CORPORATION - CORRALES, NEW MEXICO - (505) 897-0000



FEMA MAP NO. 35043C2126D DATED MARCH 18, 2008

**GENERAL NOTES:**

- CONTRACTOR SHALL PROMPTLY NOTIFY THE PROJECT ENGINEER (505-897-0000) OF ANY CONFLICTS OR DISCREPANCIES DISCOVERED IN THE FIELD.
- DISTURBED AREAS SHALL BE PROTECTED FROM EROSION DURING CONSTRUCTION BY DIVERSION OF STORM WATER AROUND THE DISTURBED AREA. PROVIDE SIDE LOT BERM (12" OR LESS) TO PREVENT CROSS LOT DRAINAGE AT TIME OF BUILDING PERMIT IF REQUIRED.
- LAND SHALL NOT BE GRADED OR CLEARED OF VEGETATION UNTIL ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES ARE INSTALLED. ACCEPTABLE EROSION AND SEDIMENT CONTROL DEVICES INCLUDE 3:1 FENCING, SWALES, STRAW BALES, BERMS, GEOTEXTILES SEDIMENT BASINS OR TRAPS, OR FENCING. ALL CONTROL DEVICES MUST BE KEPT IN PLACE AND USED UNTIL ALL THE DISTURBED AREA IS PERMANENTLY STABILIZED.
- ALL SIGNIFICANT TREES, EXISTING VEGETATION AND DRAINAGE WAYS THAT ARE TO REMAIN UNDISTURBED SHALL BE FENCED OFF PRIOR TO THE USE OF HEAVY MACHINERY ON SITE AND SHALL REMAIN FENCED DURING THE ENTIRE CONSTRUCTION PROCESS. ACCEPTABLE FENCING MATERIAL INCLUDES SNOW FENCING OR PLASTIC MESH. PLACE FENCING 5' TO THE OUTSIDE OF THE DRIP LINE OF SIGNIFICANT TREES.
- ALL SOIL STOCKPILES MUST BE PROTECTED FROM WIND AND WATER EROSION BY USING APPROPRIATE EROSION CONTROL CONTROL TECHNIQUES. ALL TOPSOIL SHALL BE KEPT ON SITE AND THEN REINTRODUCED INTO PLANTING AREAS.
- FOR PROJECTS WHICH DISTURB AREAS GREATER THAN 5,000 SF, TECHNIQUES TO PREVENT THE BLOWING OF DUST OR SEDIMENT FROM THE SITE, SUCH AS WATERING DOWN EXPOSED AREAS, ARE REQUIRED.
- THE LOT OWNER IS RESPONSIBLE FOR THE MAINTENANCE OF DRAINAGE PONDS AND DRAINAGE CONVEYANCES.
- BOUNDARY SHOWN HEREON IS FOR REFERENCE ONLY. BEARINGS AND DISTANCES SHOWN HEREON ARE FOR REFERENCE ONLY. SAID BOUNDARY LINE, BEARINGS AND DISTANCES SUBJECT TO A BOUNDARY SURVEY MAY VARY FROM THIS MAP.

**GEOTECHNICAL:**

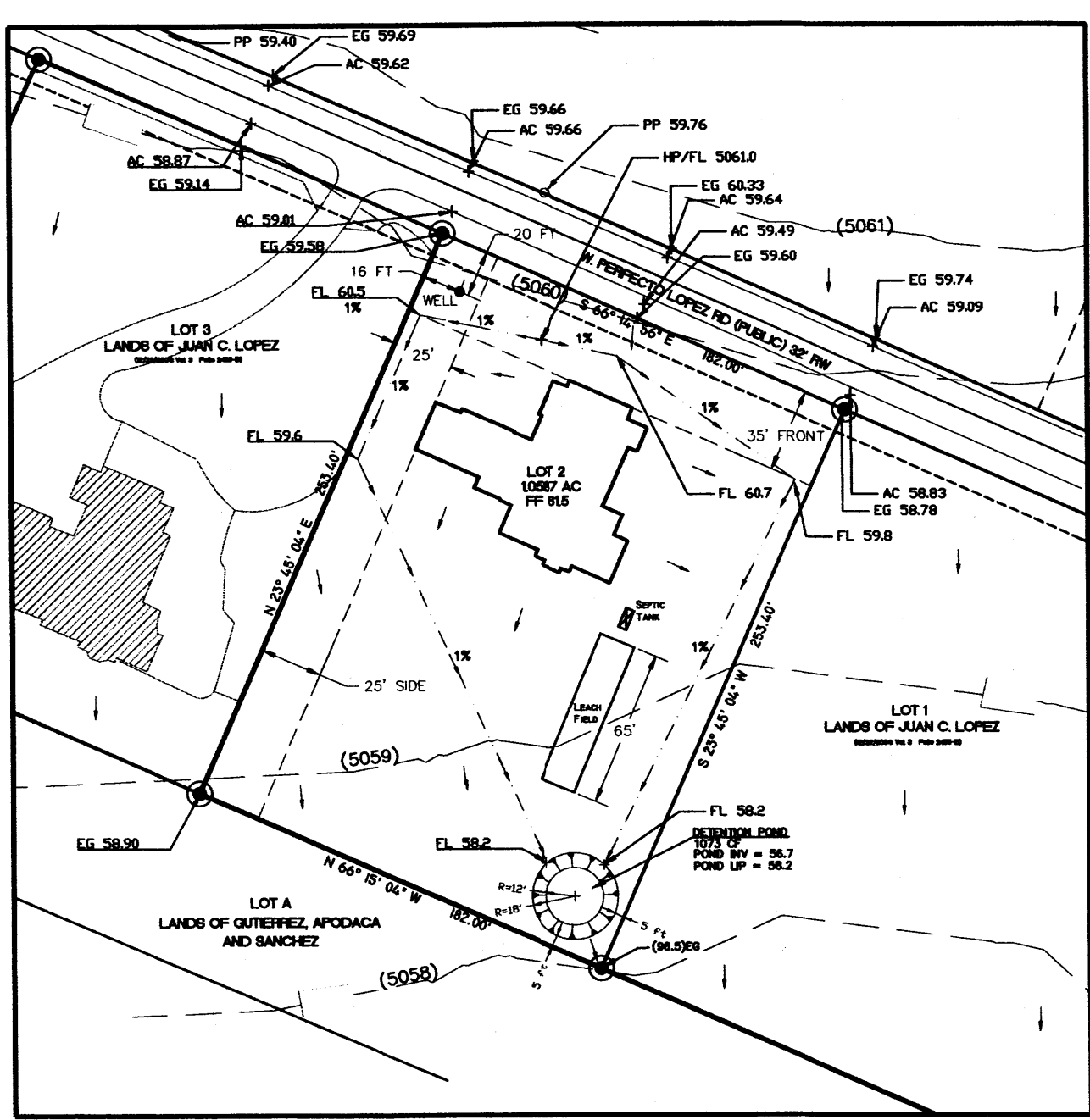
- REFER TO GEOTECHNICAL REPORT BY VINYARD & ASSOCIATES (V & A PROJECT NO. 10-1-14-9), DATED 10/25/10 FOR SOIL PERCOLATION TEST RECOMMENDATIONS.

**GRADING AND DISCLAIMER NOTES:**

- THE CONSTRAINTS GIVEN ON EXISTING (PRE-DEVELOPMENT/POST-SUBDIVISION) GRADES, FOOTPRINT, BUYER, AND BUILDER PREFERENCES IMPACTS THIS SITE PLAN TO THE EXTENT THAT THE ENGINEER CERTIFYING HEREON DISCLAIMS LIABILITY FOR THE FOLLOWING:
  - A: DRIVEWAY GRADES ON EXCESS OF 14% GRADE
  - B: SIDE HILLS AND SLOPES IN EXCESS OF 3:1
  - C: EROSION CONTROL FOR NON-VEGETATED OR STABILIZED GRADIENTS
  - D: EROSION RUNOFF OR STORM WATER CONSEQUENCES RESULTING FROM BUILDER/LANDSCAPER OR HOME BUYER CONSTRUCTION.
- GRADING ACTIVITIES ON ADJACENT PROPERTY OR RIGHTS-OF-WAY WITHOUT WRITTEN PERMISSION FROM THE OWNER IS TRESPASSING, AND THEREFORE ILLEGAL.
- SLOPE SHALL BE NO GREATER THAN 4H:1V PER VILLAGE CODE/POLICIES. IF THERE IS SUFFICIENT SLOPE PROTECTION (I.E. PLANTINGS, ROCK COVER, SHOTCRET/CONCRETE) SLOPES MAY BE NO STEEPER THAN 3H:1V.
- DEVELOPMENT AND CONSTRUCTION OF THIS GRADING AND DRAINAGE PLAN WILL NOT ADVERSELY AFFECT OTHER PROPERTIES, BUT IMPROVE DOWNSTREAM CONDITIONS BY PONDING OF SMALL STORM FLOWS.

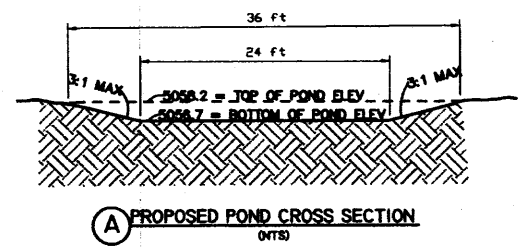
**UTILITY NOTES:**

- IF ANY UTILITY LINES OR PIPELINES (ABOVE OR BELOW GROUND) ARE DEPICTED HEREON, THEY ARE DEPICTED APPROXIMATELY AND ARE NOT TO BE RELIED UPON FOR EXACT LOCATION. FURTHERMORE, EXISTING LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE DEPICTED HEREON, THEIR LOCATIONS ARE BASED ON INFORMATION PROVIDED BY RESPECTIVE UTILITY AND/OR PIPELINE COMPANIES, THE OWNER, OR OTHERS, AND THE INFORMATION MAY BE INCOMPLETE OR OBSOLETE BY THE TIME CONSTRUCTION COMMENCES.
- THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITIES, PIPELINES, OR UNDERGROUND UTILITY LINES, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM HIMSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE OR UNDERGROUND UTILITY LINE IN OR NEAR THE WORK AREA IN ADVANCE OF AND DURING EXCAVATION WORK. THE DAMAGE CAUSED BY HIS OR HER FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES AND UNDERGROUND UTILITY LINES. THE CONTRACTOR IS URGED TO COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF SUCH LINES, IN THE PLANNING OF AND CONDUCTING EXCAVATION.



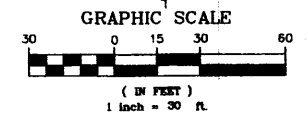
**GRADING & DRAINAGE PLAN  
CALMAN RESIDENCE  
701 PERFECTO LOPEZ RD  
CORRALES, NM  
LANDS OF JUAN C. LOPEZ  
LOT 2**

VILLAGE OF CORRALES  
SANDOVAL COUNTY, NEW MEXICO  
OCTOBER 20, 2010



**LEGEND:**

- > DRAINAGE FLOW ARROWS
- > ROOF DRAINAGE FLOW ARROWS
- - - DRAINAGE SWALE
- - - PROPERTY / ROW LINE
- - - EXISTING CONTOURS
- - - PROPOSED CONTOURS
- HP HIGH POINT
- ▨ SLOPES 15% AND GREATER
- ▨ SLOPES 8% TO 15%



**ENGINEERS CERTIFICATION**  
I, BOLESLO A. ROMERO, HEREBY CERTIFY THAT I PERSONALLY INSPECTED THE SITE SHOWN ON THIS SITE ON 10/18/10, AND AS OF THAT DATE IT APPEARED THAT NO FILLING, GRADING, OR EXCAVATION HAD OCCURRED THEREON SINCE COMPLETION OF THE TOPOGRAPHIC SURVEY TO PREPARE THIS PLAN.  
*Boleslo A. Romero* 10/27/10  
BOLESLO A. ROMERO, NMPE #8535 DATE

**GEOTECHNICAL (PERCOLATION):**  
A SOIL PERCOLATION TEST WAS PERFORMED BY VINYARD & ASSOCIATES ON 10/21/10. THE RESULTS OF THE TEST (PROJECT NO. 10-1-14-9 DATED 10/25/10) INDICATE THAT THE PERCOLATION RATE AT THE PROPOSED POND LOCATION IS 1.5 INP. THE 18" DEEP POND WILL THEREFORE DRAIN IN 1.5 HOURS X 18 IN = 27 MINUTES WHICH COMPLIES WITH THE VILLAGE ORDINANCE THAT THE POND DRAIN IN 24 HOURS.

IMPERVIOUS AREA (SF)	
PROPOSED HOUSE:	4142
MISC STRUCTURES:	0
POOL DECK:	0
FUTURE:	0
<b>TOTAL:</b>	<b>4142 SF</b>

**STORM RUNOFF CALCULATIONS**

DESIGN EVENT:	2.66 INCHES / 60 MINUTES
IMPERVIOUS AREA:	(SEE IMPERVIOUS AREA TABLE) = 4,142 SF
RUNOFF CALCULATION:	2.66 INCHES X 1 FT / 12 IN X 4,142 SF = 919 CF
POND VOLUME REQUIRED:	919 CF

**STORM POND VOLUMES**

POND VOLUME REQUIRED (SEE CALCULATIONS ABOVE): 919 CF

POND VOLUME PROVIDED: CIRCULAR POND WITH 18" RIM & 12" BASE

$$\text{BASE VOLUME} = 1/3 \times H \times (A1 + A2 + (A1 \times A2)^{1/2})$$

$$= 1/3 \times 1.5 \times [(1017 \times 452) + (1017 \times 452)^{1/2}]$$

$$= 0.5 \times [1017 + 452 + (1017 \times 452)^{1/2}]$$

$$= 0.5 \times 2147 = 1073.5 \text{ CF}$$

**TOTAL VOLUME PROVIDED = 1,073 CF**

**CALMAN RESIDENCE  
GRADING AND DRAINAGE PLAN**

REV.	SHEETS	VILLAGE ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE
		ENGINEER'S SEAL	Oct. 26, 10	Community Sciences Corporation	10/27/10	Village of Corrales	

APPROVED FOR CONSTRUCTION

PROJECT NO. \_\_\_\_\_ SHEET 1 OF 1