DRAINAGE SUMMARY

EXISTING CONDITIONS:
AS INDICATED ON THE GRADING & DRAINAGE PLAN PREPARED BY RICHARD LOVATO DATED / SEALED 5/9/2004, THE RANCHO DE CANDELARIA SUBDIVISION WAS ROUGH GRADED AND CERTIFIED RECORD DRAWINGS WERE PROVIDED ON 11/27/2005. THE SUBDIVISION WAS DESIGNED UTILIZING THE "FLAT GRADING SCHEME" AS ALLOWED IN THE PROXIMITY OF THE AREA AS REFERENCED IN SECTION 22.2 OF THE DPM. THROUGHOUT THE 8 LOT SUBDIVISION, RETENTION PONDS HAVE BEEN PLACED TO RECEIVE DEVELOPED FLOWS FROM EACH LOT AND 1/2 OF THE DEVELOPED STREET FRONTAGE. THE REQUIRED PONDING VOLUME FOR EACH LOT WAS PROVIDED IN THE TABLE FROM THE ORIGINAL GRADING AND DRAINAGE PLAN UTILIZING THE 10-DAY, 100YR EVENT. LOT 7 WAS CONSTRUCTED WITH 2 RETENTION PONDS THAT ACCEPT 1/2 OF THE DEVELOPED FLOWS FROM 1/2 OF THE ADJACENT STREET (CONRADO COURT NW) AND FROM THE DEVELOPED FLOWS FROM LOT 7 ITSELF.
ACCORDING TO FIRM MAP 35001C0331, THE SITE IS IN FLOOD HAZARD ZONE X.

PROPOSED CONDITIONS:
THE GRADING AND DRAINAGE PLAN SHOWS TWO BASINS (A & B) SHOWING THE PROPOSED BUILDING FOOT FOR LOT 7 AND THE PROPOSED MODIFICATIONS TO THE RETENTION PONDS. AS SHOWN ON THE PLAN, DEVELOPED FLOWS FROM BASIN A DRAIN NORTH INTO THE ADJACENT POND WHICH HAS THE CAPACITY FOR 1271CF, WHICH IS GREATER THAN THE REQUIRED 10-DAY, 100YR EVENT OF 1215CF FOR BASIN A. THE DEVELOPED FLOWS FROM BASIN A IS 0.52CFS. BASIN B COLLECTS 1/2 OF THE ELEVATED STREET FRONTAGE THAT ENTERS THE SITE FROM THE EAST VIA THE EXISTING MOUNTABLE ESTATE TYPE CURB AND DEVELOPED FLOWS FROM THE SOUTHERN PORTION OF THE SITE. BOTH AREAS OF THIS BASIN ARE TO DRAIN INTO THE ADJACENT COLLECTION POND ADJACENT TO THE SOUTH PROPERTY LINE OF THE SITE. HERE, THE DEVELOPED FLOWS FROM BASIN B IS 0.38CFS.

CIVIL CONSTRUCTION NOTES

A. GENERAL

1. The contractor shall be responsible for verifying the existence and location of all underground utilities.
2. Contractor shall repair any and all infrastructure damaged during the course of construction in accordance with City of Albuquerque specifications.
3. The contractor shall notify all applicable utility companies two (2) working days prior to any digging or excavation.
4. The jobsite, at the completion of construction, shall be cleaned of any debris or spoils resulting from the construction.
5. It is the contractor's responsibility to inspect the job site to familiarize herself/himself with all the existing conditions that could affect the installation of any work set forth in these plans.
6. Contractor is responsible for obtaining all required construction permits including a topsoil disturbance permit, prior to start of construction.
7. All work on this project shall be performed in accordance with applicable Federal, State and Local laws, rules and regulations concerning construction safety and health.
8. The contractor shall not install items as shown on the plans when it is obvious that field conditions are different than shown in the design. Such conditions should be brought to the attention of the Engineer. In the event the contractor does not notify the Engineer, the contractor assumes full responsibility and expense for any revisions necessary.
9. Existing site improvements which are damaged or displaced by the contractor shall be removed and replaced by the contractor.
10. Existing fencing that is not designated for removal shall not be disturbed. Any fencing that is disturbed or altered by the contractor shall be restored to its original condition at the contractor's expense. If the contractor would like to remove fencing to facilitate construction operations, this may be done with the owner's permission, and the contractor shall restore the fence to its original condition prior to the close of the project. Contractor is responsible for security of the site until the fence is replaced.
11. The contractor shall refer to the project specifications for site specifications. Any work within the City easements or ROW shall follow COA Specifications for Public Infrastructure.
12. All existing mainline utilities are to remain in place and are to be protected during demolition and construction.
13. Neither the owner, nor the Architect or Engineer of record will enforce any safety measure or regulation. The contractor shall design, construct and maintain all safety devices, including traffic control, shoring, and shall be solely responsible for conforming to all local, state and federal safety and health standards, laws and regulations.
14. Contractor will be responsible for any monumentation and/or benchmarks which will be disturbed or destroyed by construction. Such points shall be referenced and replaced with appropriate monumentation by a licensed land surveyor.
15. Any work done without inspection or testing is subject to removal or correction.
16. The engineer of record shall not be responsible for the contractor's failure to carry out the construction work in accordance with the contract documents, nor shall he be required to supervise the conduct of the work or the construction procedures and safety procedures followed by the contractor or the subcontractor or their respective employees or by any other person at the job site other than that of the Engineer's employees.
17. Contractor agrees that he shall assume sole and complete responsibility for the job site conditions during the course of construction of this project, including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal working hours; and that the contractor shall defend, indemnify and hold the owner and engineer harmless of any and all liability, real or alleged, in connection with the performance of work on this project, excepting liability arising from the sole negligence of the owner or the Engineer.
18. The contractor is specifically cautioned that the location and/or elevation of existing utilities as shown on these plans are based on records of the various utility companies and, where possible, measurements taken in the field. The information is not to be relied upon as being exact or complete. The contractor must call the appropriate utility company at least 48 hours before any excavation to request exact field location of utilities. It shall be the responsibility of the contractor to relocate all existing utilities which conflict with the proposed improvements shown on the plans.
19. Contractor is responsible for obtaining all permits to construct facilities within City easements or ROW.
20. All existing topo, existing boundary, existing easement information, & existing utilities shown on the design drawings were obtained from Harris Surveying Co. and Cartesian Surveyors. GJA, LLC is not responsible for any descrepancies or redesign of any and all infrastructure due to the inaccuracy of the surveys.
    The contractor shall reference the boundary and topographic survey prepared by Harris Surveying for all easements, existing infrastructure and elevations. In June 2014, supplemented by Cartesian Surveyors who provided interim grading asbuilts and the actual location of the house pad after the contractor moved the structure 4' north and parallal to the east property line and raised the pad 0.33'. Adjustments were made to the approved plan dated/sealed February February 2/24/14.
    The contractor shall contact Harris Surveying or Cartesian Surveyors for surveying control, construction staking and final asbuilts with mark-ups provided by GJA, LLC.

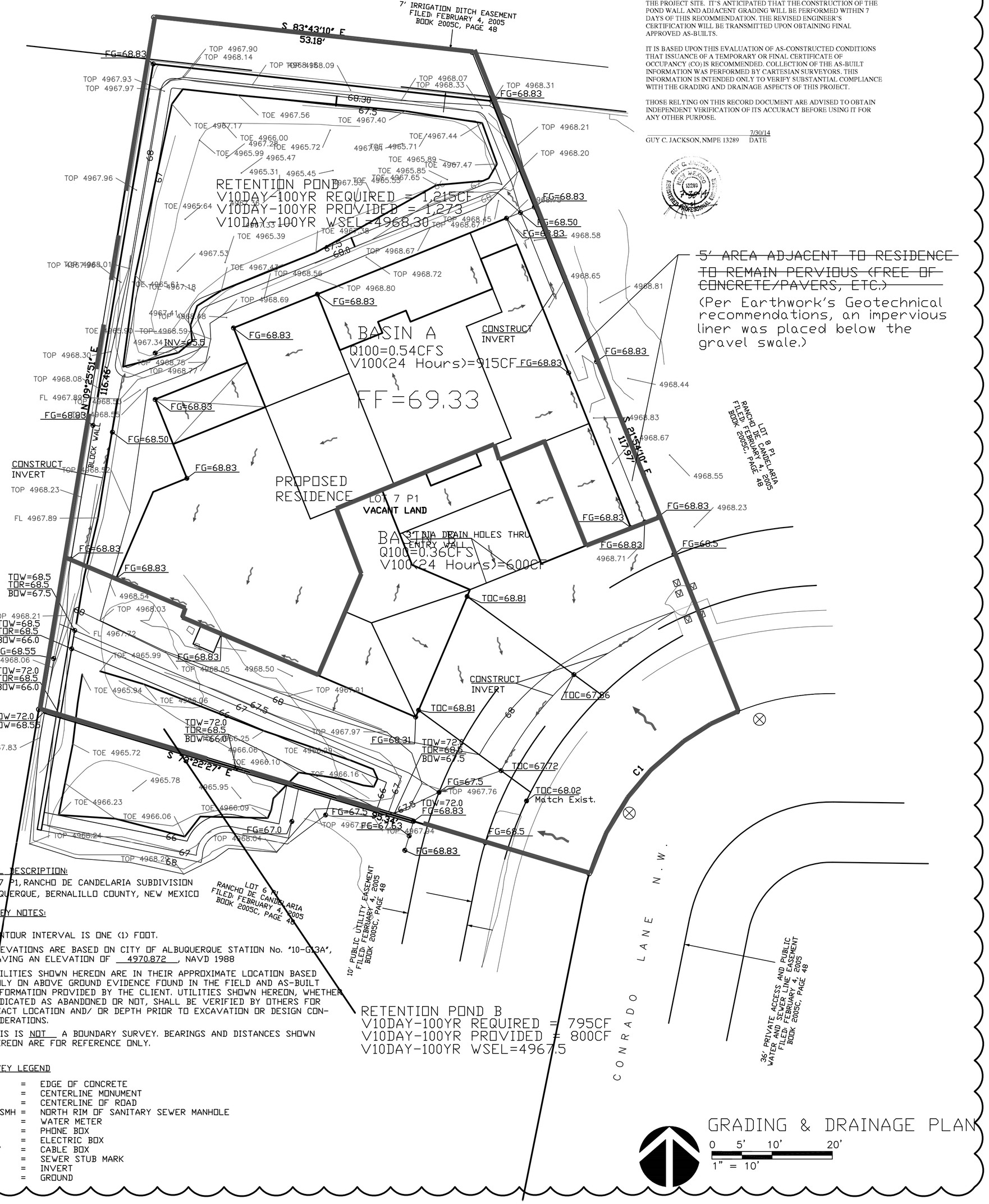
B. GRADING & DRAINAGE NOTES

1. The contractor shall excavate the existing soils in the pond areas to a depth recommended by the geotechnical report and supplmental letters provided by Earthworks Engineering Group, LLC. Free draining material with gradation and classification provided by Earthworks Engineering Group shall then be placed once verified by the contractor w/ the concurrance of the geotechnical engineer.
2. The contractor shall install 3' to 8' diameter cobbles in the retention ponds per the recommendations of Earthworks Engineering Group, LLC.
3. The location of the retention ponds shown on this plan were placed a minimun distance of 5' from the proposed structure(s) similar to those shown on the certified record drawings prepared by Richard Lovato, PE dated 11/27/05. This grading plan does not address existing soil types nor treatment of soils for the potential saturation of soils adjacent to structures. The contractor shall obtain supplemental recommendations from Earthworks Engineering Group, LLC for treatment of the pond soils to prevent saturation of structure foundations.
4. Once grading is constructed and approved, the owner shall maintain all drainage paths, retention ponds, drain pipe and areas not to receive impervious treatment.
5. The contractor shall follow earthwork recommendations per the geotechnical report and suppmental letters provided by Earthworks Engineering Engineering Group, LLC.
6. The contractor shall obtain and follow earthwork recommendations per the geotechnical engineer and the contractor's structural engineer for the design and construction of the retention pond wall that is shown to be placed at the south property line of lot 7.
   The retention pond wall shall be designed for the hydrostatic and solid saturation conditions resulting from the retention of the storm water runoff indicated by this plan and the certified grading plan prepared by Richard Lovato dated 11-27-05.
7. The contractor shall provide copies of this revised grading plan to obtain recommendations from the geotechnical engineer for waterproofing of structures adjacent to the drainages and retention ponds.
8. The contractor shall provide adjusted roof drain plan to GJA, LLC that match roof drain and site drainage patterns established by this plan prior to final Certificate of Occupancy request.
9. The contractor shall follow the waterproofing recommendations of the geotechnical engineer for the swales and the protection of the foundations.

C. EROSION CONTROL, ENVIRONMENTAL PROTECTION, AND STORM WATER, POLLUTION PREVENTION PLAN

1. The contractor shall conform to all City, County, State, and Federal dust and erosion control regulations. The contractor shall prepare and obtain any necessary dust or erosion control permits from regulatory agencies.
2. The contractor shall secure an excavation and dirt moving permit from the appropriate County Environmental Health Division prior to beginning construction if required.
3. The contractor shall promptly renove any material excavated within the public Right-Of-Way to keep it from washing off the project site.
4. The contractor shall ensure that no soil erodes from the site onto other property by constructing temporary erosion control berms or installing silt fences at the property lines and wetting the soil to keep it from blowing.
5. Watering, as required for construction and dust control, shall be considered incidental to construction and no measurement or payment shall be made there of. Construction areas shall be watered for dust control in compliance with government ordinances. The contractor shall be responsible for locating and supplying water as required.
6. Any areas disturbed by construction and not covered by landscaping or an impervious surface shall be revegetated with reclamation seeding.
7. The contractor shall properly handle and dispose of all asphalt renoved on the project by hauling to an approved landfill in accordance with the requirements of the State of New Mexico.
8. All waste products from the construction site, including items designed for removal, construction waste, construction equipment waste products (oil, gas, tires, etc.), garbage, grubbing, excess cut material, vegetative debris, etc. shall be appropriately disposed of off-site at no additional cost to the owner. It shall be the contractor's responsibility to obtain any permits required for haul or disposal of waste products. It shall be the contractor's responsibility to ensure that the waste disposal site complies with government regulations regarding the environment, endangered species, and archaeological resources.
9. The contractor shall be responsible for the clean-up and reporting of spills of hazardous materials associated with the construction site. Hazardous materials include gasoline, diesel fuel, motor oil, solvents, chemicals, paint, etc. which may be a threat to the environment. The contractor shall report the discovery of past or present spills to the appropriate County Environmental Department.
10. The contractor shall comply with all applicable regulations concerning surface and underground water. Contact with surface water by construction and personnel shall be minimized. Equipment maintenance and refueling operations shall be performed in an environmentally safe manner in compliance with government regulations.
11. The air pollution control regulations of the appropriate county environmental services dept., county air quality control board limit the emission of particulates and the use of cutback asphalt. The contractor shall apprise himself of these regulations prior to bidding and performing the work.
12. The contractor shall comply with all applicable regulations concerning construction noise and hours of operations.
13. The contractor shall conform to all City, County, State & Federal storm water pollution prevention requirements established under the Natural Pollutant Discharge Elimination System (NPDES). The contractor shall prepare & obtain all NPDES permits for storm water point source discharges. A Storm Water Pollution Prevention Plan shal be provided by the contractor. The contractor shall maintain the site and keep all applicable records to maintain to the SWPPP.

6/16/08 GJA



LEGAL DESCRIPTION:
LOT 7 P1, RANCHO DE CANDELARIA SUBDIVISION
ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

SURVEY NOTES:

1. CONTOUR INTERVAL IS ONE (1) FOOT.
2. ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE STATION No. '10-G13A', HAVING AN ELEVATION OF 4970.872, NAVD 1988
3. UTILITIES SHOWN HEREON ARE IN THEIR APPROXIMATE LOCATION BASED ONLY ON ABOVE GROUND EVIDENCE FOUND IN THE FIELD AND AS-BUILT INFORMATION PROVIDED BY THE CLIENT. UTILITIES SHOWN HEREON, WHETHER INDICATED AS ABANDONED OR NOT, SHALL BE VERIFIED BY OTHERS FOR EXACT LOCATION AND/ OR DEPTH PRIOR TO EXCAVATION OR DESIGN CONSIDERATIONS.
4. THIS IS NOT A BOUNDARY SURVEY. BEARINGS AND DISTANCES SHOWN HEREON ARE FOR REFERENCE ONLY.

SURVEY LEGEND

EC	=	EDGE OF CONCRETE
CLM	=	CENTERLINE MONUMENT
CLR	=	CENTERLINE OF ROAD
NRSASMH	=	NORTH RIM OF SANITARY SEWER MANHOLE
WM	=	WATER METER
PHB	=	PHONE BOX
EBX	=	ELECTRIC BOX
CATV	=	CABLE BOX
SSM	=	SEWER STUB MARK
INV	=	INVERT
G	=	GROUND

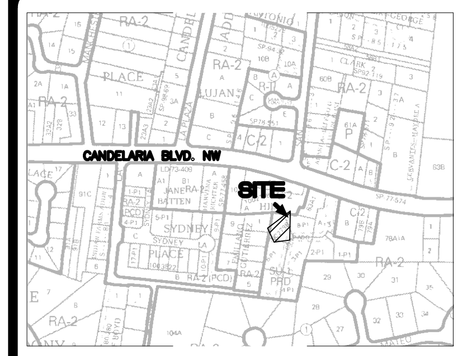
AS INDICATED BY THE AS-BUILT INFORMATION SHOWN HEREON, WITH THE EXCEPTION OF THE POND WALL AND ADJACENT ARADING LOCATED BETWEEN LOTS 6 & 7, THE PROJECT APPEARS TO HAVE BEEN CONSTRUCTED IN SUBSTANTIAL CONFORMANCE WITH THE INTENT OF THE APPROVED GRADING AND DRAINAGE PLAN -ENGINEER'S SEAL 2-24-14, REVISED 7-6-14. ONCE THE WALL IS COMPLETED AND THE ADJACENT DISTURBED GRADES ARE RE-ESTABLISHED TO CONFORM TO THE REVISED APPROVED PLAN, ANOTHER CERTIFIED AS-BUILT WILL BE PROVIDED FOR THE PROJECT SITE. IT'S ANTICIPATED THAT THE CONSTRUCTION OF THE POND WALL AND ADJACENT GRADING WILL BE PERFORMED WITHIN 7 DAYS OF THIS RECOMMENDATION. THE REVISED ENGINEER'S CERTIFICATION WILL BE TRANSMITTED UPON OBTAINING FINAL APPROVED AS-BUILTS.

IT IS BASED UPON THIS EVALUATION OF AS-CONSTRUCTED CONDITIONS THAT ISSUANCE OF A TEMPORARY OR FINAL CERTIFICATE OF OCCUPANCY (CO) IS RECOMMENDED. COLLECTION OF THE AS-BUILT INFORMATION WAS PERFORMED BY CARTESIAN SURVEYORS. THIS INFORMATION IS INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE WITH THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT.

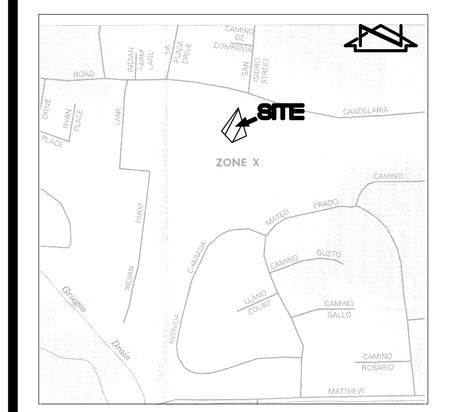
THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

7/30/14
GUY C. JACKSON, NMPE 13289 DATE

GUYJACKSON and associates, LLC
CIVIL ENGINEERING



VICINITY MAP G-13
SCALE: NTS



F.I.R.M. PANEL 331 of 825
SCALE: NTS DATED 09-26-2008
FEDERAL EMERGENCY MANAGEMENT AGENCY

LEGEND

	DIRECTION OF FLOW
	PROPOSED BASIN BOUNDARY
FG=57.75	PROPOSED SPOT ELEVATION
6424	EXISTING CONTOUR
6424	PROPOSED CONTOUR

REV.	DESCRIPTION	DATE
2	RECORD AS-BUILTS	7-30-14
1	GRADING REVISIONS	JULY 2014

GUY C. JACKSON NEW MEXICO 13289 REGISTERED PROFESSIONAL ENGINEER 7-30-2014
ENGINEER

ARCHITECT

Lot 7, Conrado Ct. NW
Albuquerque, NM

PROJECT NO.

DATE
FEBRUARY 2014

GRADING & DRAINAGE PLAN

DRAWING NO.
C-2.1