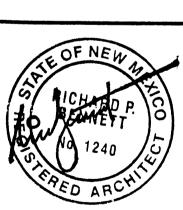
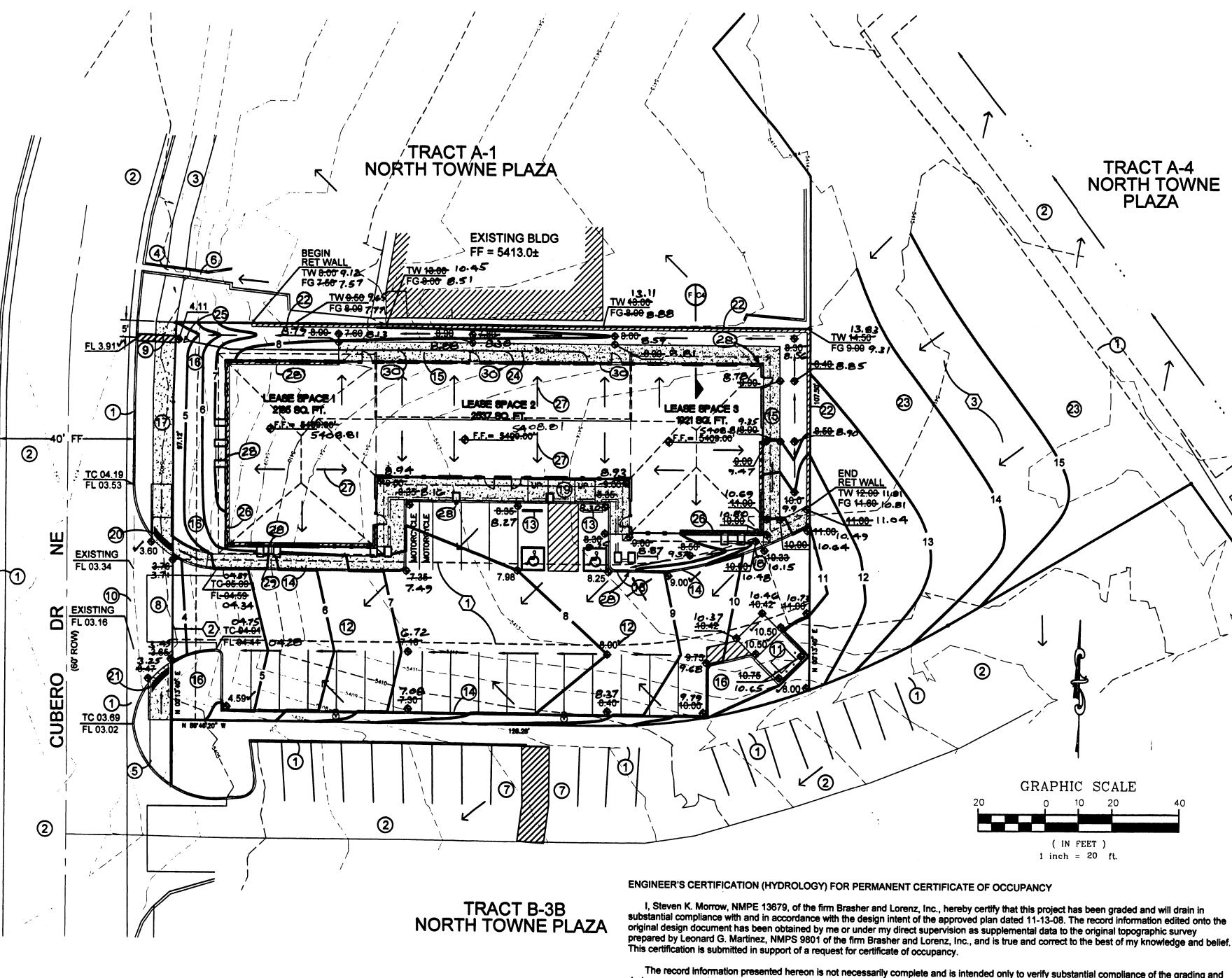


ENGINEERS CERTIFICATION (TCL) FOR PERMANENT CERTIFICATE OF

OCCUPANCY



HYDROLOGY



The record information presented hereon is not necessarily complete and is 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.



DRAINAGE PLAN NOTES

- 1. BLI recommends that the Owner obtain a Geotechnical Evaluation of the on-site soils prior to foundation/structural design.
- 2. This Plan recommends positive drainage away from all structures to prohibit ponding of runoff which may cause structural settlement. Future alteration of grades adjacent to the proposed structures is not recommended.
- 3. Irrigation within 10 feet of any proposed structure is not recommended. Introduction of irrigation water into subsurface soils adjacent to the structure could cause settlement.
- 4. This Plan is prepared to establish on-site drainage and grading criteria only. BLI assumes no responsibility for subsurface analysis, foundation/structural design, or utility design.
- 5. Local codes may require all footings to be placed in natural undisturbed soil. If the Contractor plans to place footings on engineered fill, a certification by a registered Professional Engineer will be required. If the contractor wishes BLI to prepare the Certification, we must be notified PRIOR to placement of the fill.
- 6. BLI recommends that the Owner obtain the services of a Geotechnical Engineer to test and inspect all earthwork aspects of the project.
- 7. The property boundary shown on this Plan is given for information only to describe the project limits. Property boundary information shown hereon does not constitute a boundary survey. A boundary survey performed by a licensed New Mexico Registered Professional Surveyor is recommended prior to construction.
- 8. All spot elevations are top of pavement unless noted otherwise.

ALL ACCESSIBLE IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT. FAILURE TO DO SO MAY RESULT IN REJECTION OF CERTIFICATE OF OCCUPANCY.

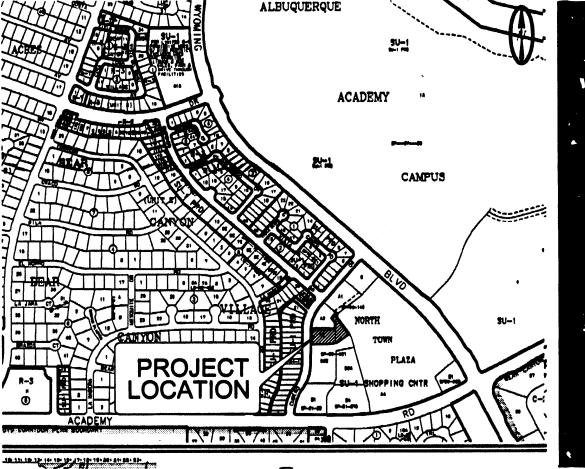
O KEYED NOTES

- 1. EXISTING STANDARD CONCRETE CURB AND
- 2. EXISTING ASPHALT PAVEMENT.
- 3. EXISTING 6' SIDEWALK.
- 4. EXISTING SIDEWALK CULVERT. 5. EXISTING H/C RAMP.
- 6. EXISTING FLUME.
- 7. EXISTING H/C PARKING AND STRIPING. 8. EXISTING UTILITIES TO BE RELOCATED BY USER.
- 9. CONSTRUCT 24" SIDEWALK CULVERT PER COA DWG 2238. 10. CONSTRUCT NEW VALLEY GUTTER PER COA DWG
- 11. NEW REFUSE ENCLOSURE WITH STUCCO FINISH.
- SEE SITE PLAN.
- 12. NEW ASPHALT PAVEMENT. 13. NEW TIRE STOPS.
- 14. NEW 6" CONCRETE CURB. & GUTTER 15. NEW 5' WIDE SIDEWALK.
- 16. NEW LANDSCAPING.
- 17. CONSTRUCT 6' SIDEWALK PER DWG 2430. 18. PROVIDE 6" CURB BLOCKOUT FOR DRAINAGE
- 19. CONSTRUCT HCR PER DETAILS D/C-4 AND E/C-4. 20. CONSTRUCT HC A PER DETAIL H/C-4.
- 21. CONSTRUCT HC B PER DETAIL G/C-4. 22. CONSTRUCT RETAINING WALL PER DETAIL J/C-4.
- 23. GRAVEL SURFACING.
- 24. CONSRTUCT 6" PVC SD. SEE PLUMBING PLAN. 25. PROVIDE END SECTION AT SD OUTLET INV =04.50. 26. STEM FOUNDATION WALL. SEE FOUNDATION PLAN.
- 27. DIRECTION OF ROOF DRAINAGE TYPICAL. 28. ROOF DRAIN
- 29. SLOTTED DRAIN ACROSS SIDEWALK 30. ROOF DRAIN DRAINS TO I'KI' AREA DRAIN THAT DRAINS TO 6" PVC STORM DRAIN

EASEMENT SCHEDULE

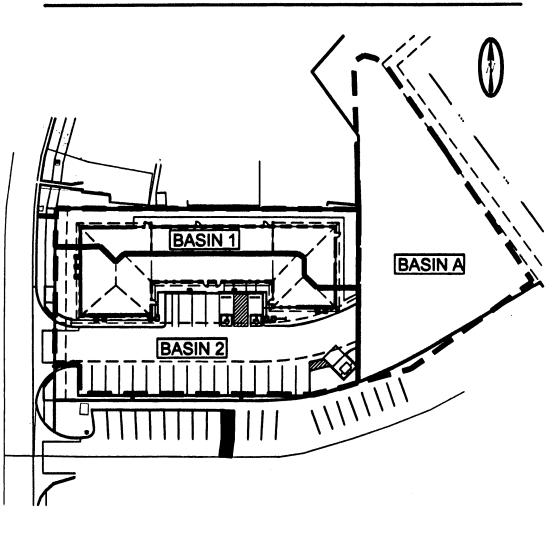
- 1 EXISTING 24' PRIVATE ACCESS AND DRAINAGE EASEMENT 95C-234 (7-27-95).
- ② EXISTING 7' PUBLIC UTILITY EASEMENT C16-26
- (12-19-79). 3 PRIVATE DRAINAGE EASEMENT 95C-284 (7-27-95).

		PI	ROJECT		LOGY			
ZONE:	3 1		AH	YMO				
P _{6 HOUR}								
P _{10 DAY}	4.90"							
		118	DEVELO	NDED:				
BASIN	AREA (ac)		B (ac)		D (ac)	E	Q (cfs)	VOL (ac ft)
SITE	0.48	0.00	0.00	0.48	0.00	1.29	1.7	0.052
Α	0.27	0.00	0.00	0.27	0.00	1,29	0.9	0.029
		DE	VELOPE	D (PROF	POSED):			
BASIN	AREA (ac)		B (ac)		D (ac)	E	Q (cfs)	VOL (ac ft)
1	0.13	0.00	0.00	0.050	0.080	1.95	0.6	0.021
2	0.35	0.00	0.00	0.050	0.300	2.21	1.7	0.065
A	0.27	0.00	0.00	0.270	0.000	1.29	0.9	0.029



ZAP E-19-Z

FIRM PANEL 35001C0354E



EXISTING BASIN MAP

LEGEND

ITEM EXISTING PROPOSED ____ **CURB AND GUTTER *** LIGHT POLE OVERHEAD ELEC --P-OHE----WITH POWER POLE OVERHEAD UTILITY -----OHU-----

G=16.7 **4** 16.7 SPOT ELEV. **RIGHT OF WAY** CENTERLINE TOP OF ASPHALT ELEV. TA 16.2 EX TA 16.2 TOP OF CURB ELEV.

CONTOUR W/ ELEVATION ______4992 — _____92 -____ **BASIN BOUNDARY**

ASPHALT PAVING DRAINAGE SWALE

BUILDING

DIRECTION OF FLOW

RETAINING WALL SIDEWALK

**** **FOUNDATION** STEM WALL

PROJECT DATA

PROPERTY ADDRESS 5900 CUBERO DR. NE

ALBUQUERQUE, NM 87109 LEGAL DESCRIPTION

TRACT A-3 NORTH TOWN PLAZA CITY OF ALBUQUERQUE BERNALILLO COUNTY, NM PROPERTY ZONING

SU-1

MAPPING **ALL PROJECT SURVEYING** BY BRASHER & LORENZ, INC. AUGUST, 2008

PROJECT BENCHMARK ACS MONUMENT "2-F19" **ELEVATION 5386.837 FEET** 1988 NAVD

GRADING & DRAINAGE PLAN

PROPOSED BASIN MAP

PURPOSE AND SCOPE

PURSUANT TO THE ESTABLISHED DRAINAGE ORDINANCE OF THE CITY OF ALBUQUERQUE AND THE DEVELOPMENT PROCESS MANUAL, THIS GRADING AND DRAINAGE PLAN OUTLINES THE DRAINAGE MANAGEMENT CRITERIA FOR CONTROLLING DEVELOPED RUNOFF FROM THE PROJECT SITE. THE PROJECT CONSISTS OF THE DEVELOPMENT OF THE PROPERTY BY CONSTRUCTING A DENTAL CLINIC. PROPOSED SITE IMPROVEMENTS INCLUDE PAVING, UTILITY, LANDSCAPING, AND GRADING AND DRAINAGE IMPROVEMENTS. THIS PLAN IS PREPARED TO SUPPORT A BUILDING PERMIT APPLICATION.

EXISTING CONDITIONS

THE PROJECT SITE CONTAINS APPROXIMATELY 0.48 ACRES AND IS LOCATED AT 5900 CUBERO DRIVE NE. THE SITE IS UNDEVELOPED. THE SITE IS BOUNDED TO THE NORTH BY DEVELOPED COMMERCIAL PROPERTY. TO THE SOUTH BY DEVELOPED COMMERCIAL PROPERTY. TO THE WEST BY CUBERO DRIVE NE AND TO THE EAST BY DEVELOPED COMMERCIAL PROPERTY. CURRENTLY, ON-SITE RUNOFF DRAINS WEST ONTO CUBERO DRIVE NE, AND SOUTH ONTO THE ADJOINING COMMERCIAL SITE PARKING LOT, OFFSITE RUNOFF, FROM THE EAST DRAINS WEST TO CUBERO DRIVE NE. OFFSITE FLOWS IMPACT THE SITE FROM UNDEVELOPED BASIN 'A' LOCATED EAST OF THE SITE. BASIN 'A' IS A PORTION OF TRACT A-4, NORTH TOWNE PLAZA SHOPPING CENTER THAT WAS RESERVED FOR A DETENTION POND. A DETENTION POND WAS CONSTRUCTED NORTH OF THE SHOPPING CENTER ON TRACT A-1 LEAVING THE SUBJECT PARCEL UNDEVELOPED AND UNUSED FOR DRAINAGE PURPOSES. IT IS PRESENTLY USED AS OVERFLOW PARKING. NO OFFSITE FLOWS ENTER THE ABANDONED POND SITE FROM THE SHOPPING CENTER. ALL SHOPPING CENTER FLOWS DRAIN TO THE TRACT A-1 POND. FLOWS FROM BASIN 'A' ENTER THE PROJECT SITE FROM THE EAST. NO FLOWS ENTER THE SITE FROM THE NORTH OR SOUTH. CUBERO DRIVE DRAINS SOUTH AWAY FROM THE SITE.

AS SHOWN BY THE FIRM PANEL FOR THIS AREA, THIS PROPERTY IS NOT LOCATED WITHIN A DESIGNATED FLOOD HAZARD ZONE.

PROPOSED CONDITIONS

AS SHOWN BY THE PLAN, THE PROPERTY IS TO BE DEVELOPED BY CONSTRUCTING A DENTAL CLINIC.

ALL DRAINAGE FLOWS WILL BE MANAGED BY ON-SITE SWALES AND SHEET FLOW. CONVEYING RUNOFF TO CUBERO FRIVE NE. THE PLAN SHOWS THE ELEVATIONS REQUIRED TO PROPERLY GRADE AND CONSTRUCT THE RECOMMENDED IMPROVEMENTS. FLOW ARROWS ARE GIVEN TO DEMONSTRATE THE DIRECTION OF DRAINAGE FLOWS, AND PROJECT HYDROLOGY IS GIVEN FOR BOTH EXISTING AND DEVELOPED CONDITIONS.

BASIN 1 WILL DRAIN WEST TO CUBERO THRU A SIDEWALK CULVERT. BASIN 2 WILL DRAIN WEST TO CUBERO THRU THE PROPOSED DRIVEWAY. BASIN 3 REPERSENTS AN OUTPARCEL THAT WILL BE GRADED AND GRAVEL SURFACED FOR OVERFLOW PARKING. EASEMENTS EXIST TO ACCOMODATE CROSS ACCESS AND DRAINAGE.

TEMPORARY EROSION CONTROL

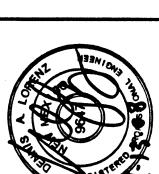
TEMPORARY EROSION CONTROL MEASURES WILL BE IMPLEMENTED DURING CONSTRUCTION TO LIMIT THE DISCHARGE OF SEDIMENT FROM THE SITE TO ADJACENT PROPERTIES. SILT FENCING IS RECOMMENDED ALONG THE DOWNSTREAM CONSTRUCTION BOUNDARIES. IT IS THE CONSTRUCTOR'S RESPONSIBILITY TO MAINTAIN ALL TEMPORARY EROSION CONTROL MEASURES AND MAINTAIN A SWPPP, IF REQUIRED, UNTIL COMPLETION OF ALL SITE PAVING, GRADING, DRAINAGE AND LANDSCAPING IMPROVEMENTS.

CALCULATIONS

THE CALCULATIONS SHOWN HEREON DEFINE THE 100 YEAR/8 HOUR DESIGN STORM IMPACTING THE SITE AND CONTRIBUTING OFF-SITE DRAINAGE BASINS UNDER EXISTING AND DEVELOPED CONDITIONS. THE AHYMO METHOD OF ESTIMATING PEAK RUNOFF IS PRESENTED AS OUTLINED IN THE DEVELOPMENT PROCESS MANUAL, VOLUME 2, SECTION 22.2, PART 'A', UPDATED JULY 1997.

CUBERO GRADING AI RIDIE

REVISION DATE



DATE 10-07-08

SHEET NUMBER

AUG 1 9 2009

08545

HYDROLOGY