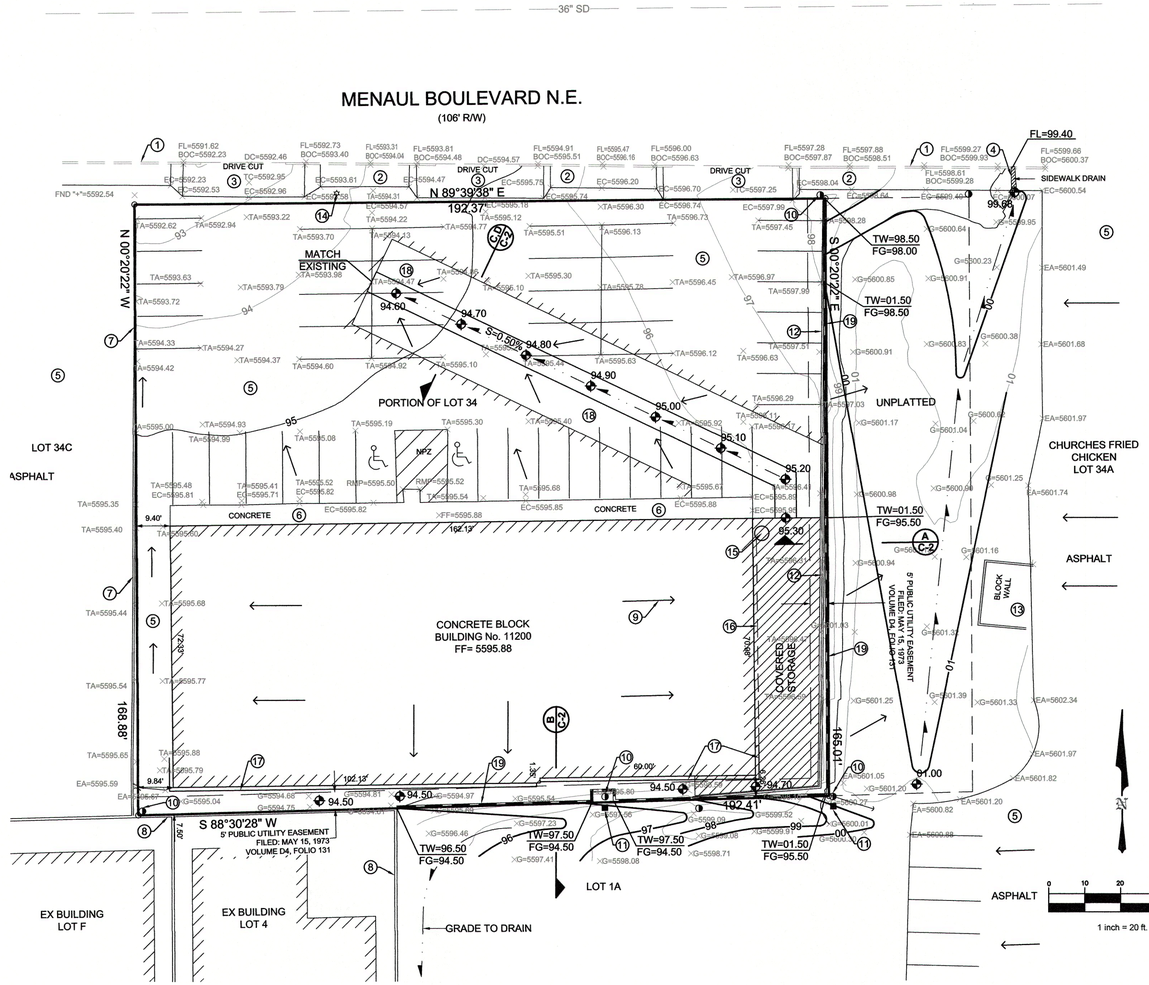
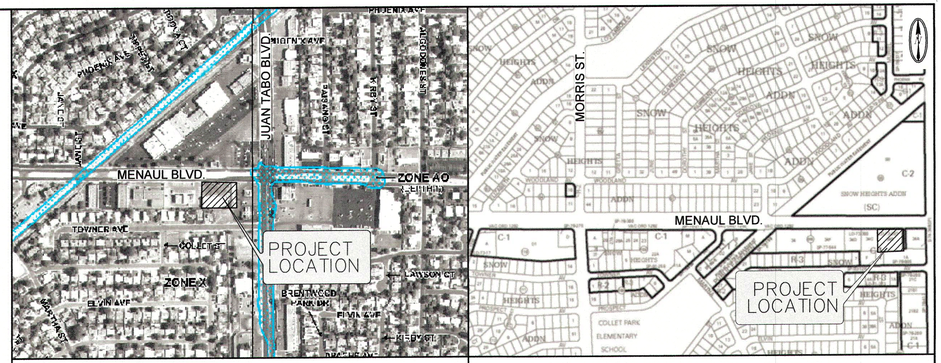
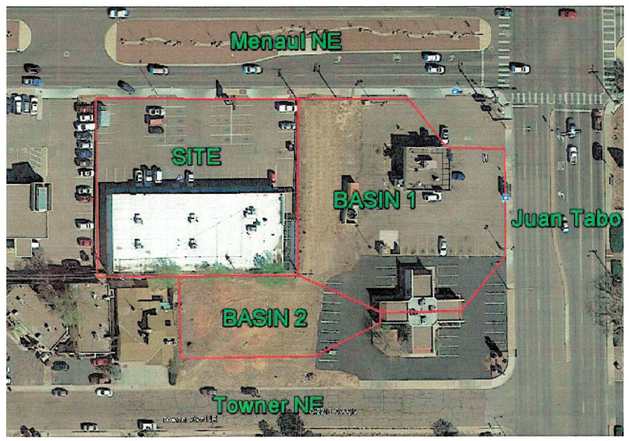




FIRM PANEL 35001C0357H

LOCATION MAP H-21-Z NTS



BASIN MAP

PROJECT HYDROLOGY	
AHYMO	
ZONE:	4
P_{6HOUR}	2.90
$P_{10\ DAY}$	5.95

11200 Menaul Blvd NE

EXISTING CONDITIONS

BASIN	AREA (ac)	A (ac)	B (ac)	C (ac)	D (ac)	E	Q100 (cfs)	VOL100 (ac ft)
SITE	0.80	0.00	0.00	0.02	0.78	2.61	**4.17**	**0.1740**
1	0.79	0.00	0.00	0.24	0.55	2.28	**3.78**	**0.1502**
2	0.32	0.00	0.00	0.22	0.10	1.83	**1.35**	**0.0488**

PROJECT DATA

PROPERTY ADDRESS:

11200 MENAUL BOULEVARD NE
ALBUQUERQUE, NEW MEXICO 87112

LEGAL DESCRIPTION:

PORTION OF LOT 34, BLOCK 88-B, SNOW HEIGHTS ADDITION

SITE MAPPING:

PLAT OF TOPOGRAPHY BY HARRIS SURVEYING, INC.
ANTHONY HARRIS, NMPLS 11465
FEBUARY 2015

PROJECT BENCHMARK

CITY OF ALBUQUERQUE BENCHMARK "2_H21"
ELEVATION (NAVD 1988)= 5605.262'

KEYED NOTES

1. EXISTING CONCRETE STANDARD CURB AND GUTTER.
2. EXISTING PUBLIC SIDEWALK.
3. EXISTING DRIVEPAD TO REMAIN.
4. EXISTING 12-INCH SIDEWALK CULVERT.
5. EXISTING ASPHALT PAVEMENT.
6. EXISTING CONCRETE TURNDOWN SIDEWALK.
7. EXISTING CONCRETE RETAINING WALL.
8. EXISTING BLOCK WALL.
9. DIRECTION OF ROOF DRAINAGE - TYPICAL.
10. EXISTING UTILITY POLE TO REMAIN.
11. EXISTING UTILITY PEDESTAL TO REMAIN.
12. REMOVE & DISPOSE EXISTING CONCRETE CURB WITH RETAINING WALL CONSTRUCTION.
13. EXISTING REFUSE PAD.
14. EXISTING LIGHT POLE TO REMAIN.
15. EXISTING CISTERN.
16. EXISTING ROOF GUTTER.
17. INSTALL NEW ROOF GUTTERS AND DOWNSPOUT TO DIRECT ROOF DRAINAGE TO SIDEYARDS.
18. REMOVE AND REPLACE EXISTING ASPHALT PAVEMENT TO LIMITS SHOWN. SEE SECTIONS A& B SHEET 2.
19. CONSTRUCT CMU RETAINING WALL. SEE DETAILS SHEET 2.

LEGEND

ITEM	EXISTING	PROPOSED
CURB AND GUTTER		TOP CONC. ELEV / FLOWLINE ELEV
CURB ELEVATIONS	TOP CONC. ELEV / FLOWLINE ELEV	
SPOT ELEV.	× 16.7	16.7
STORM DRAIN		
EASEMENT		
CENTERLINE		
TOP OF ASPHALT ELEV.	TA 16.2	TA 16.2
FLOWLINE ELEV	EX FL 16.2	FL 16.2
FUTURE FLOWLINE ELEV (N.I.C)		FUT FL 16.2
PAVING		
DRAINAGE SWALE		
DIRECTION OF FLOW		
CONCRETE PAVEMENT		
BLOCK WALL		
EXISTING FENCE	– X —— X —	
EXISTING 2 X 4 FENCE	// //	
EXISTING UTILITY POLE		
WATER METER	W	

GRADING AND DRAINAGE PLAN

PURPOSE AND SCOPE

The purpose of this Plan is to recommend the site drainage and grading improvements required to mitigate existing on-site and off-site drainage issues resulting from failed drainage management plans. Uncontrolled off-site drainage flows are seriously impacting the subject property resulting in flood damage to the existing building.

The scope of this plan is to provide grading and drainage criteria for the safe management of excess runoff impacting the site from upstream drainage basins, and controlling excess runoff from the project site in a well-managed, non-erosive manner. The objective is to mitigate on-site flooding by mitigating off-site grading and drainage issues.

This is not to be considered a land development project. This plan is prepared in support of topsoil disturbance, grading, paving and retaining wall permits.

EXISTING CONDITIONS

The project site is fully developed. The property is located at 11200 Menaul Boulevard NE. Site improvements consist of a single commercial building, and associated site improvements. The current tenant is Clark's Pet Emporium.

The site is bounded on the north by Menaul Blvd NE, on the east and west by developed commercial properties, and on the south by an undeveloped parcel. All site drainage flows around the building to Menaul Blvd where existing public storm drains convey flows to the Piedra Lisa Channel. The site is impacted by 2 off-site drainage basins.

Basin '1' represents portions of the Church's Fried Chicken store and an office building. Both sites face Juan Tabo, however, drainage from the properties flows west, draining into the project site along the east property line.

Basin '2' represents a portion of the above named office building site, of which the western portion is undeveloped. Flows from Basin '2' drain to the project site along the south property line and pond adjacent to the building.

Uncontrolled runoff from Basins 1 & 2 results in flood damage to the building and erosion along the east and south property lines. On-site the parking lots drains poorly resulting in ponding near the northeast corner of the building.

As shown by the attached FIRM Panel, the site does not lie within a mapped 100 year Flood Zone.

PROPOSED IMPROVEMENTS

This Plan proposes the following:

1. Construct retaining walls along the east and south property lines to protect the site from unmanaged off-site runoff from Basins 1 & 2.
2. Obtain permission from the off-site property owners to re-grade the property interfaces to direct un-managed runoff away from the project site towards public right of ways where flows can be managed by off-site public storm drainage improvements.
3. Re-grade the narrow portion of land along the south side of the building to provide freeboard to the existing finish floor elevation.
4. Re-construct a portion of the north parking lot to improve on-site drainage away from the building.

The Plan identifies the improvements outlined above. Elevations and construction details are provided to facilitate construction. Due to the nature of this project, the land cover types will not change, therefore this proposal will not increase developed runoff.

Construction will disturb an area of less than 1.0 acres, therefore a Storm Water Pollution Prevention Plan should not be required.

CALCULATIONS

The calculations shown hereon define the 100-year/6 hour design storm falling within the project area under existing and proposed conditions. The hydrology is per "Section 22.2, Part A, Development Process Manual, Vol 2", dated June 1997.

DRAINAGE PLAN NOTES

1. **LDC 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. LDC 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 LDC to prepare the Certification, we must be notified PRIOR to placement of the fill.**
6. **LDC 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 finished grade or top of pavement, unless noted otherwise.**

11200 MENAUL NE
GRADING & DRAINAGE PLAN

DENNIS A. LORENZ NEW MEXICO 9647 REGISTERED PROFESSIONAL ENGINEER

LORENZ DESIGN & CONSULTING, LLC
Civil Engineering | Construction Management
2501 Rio Grande Blvd NW, Suite A Albuquerque, New Mexico 87104
Ph: 505-888-6088 Fax: 505-242-6655

DRAWN BY: J.M.T.	DATE: 03/04/2015
CHECKED BY: D.A.L.	SHEET C-1
FILE: 15-002	