

CITY OF ALBUQUERQUE



October 5, 2015

Dennis Lorenz, P.E.
Lorenz Design & Consulting
2501 Rio Grande Blvd. NW Suite A
Albuquerque, New Mexico 87107

**RE: Anthea – 4th and Granite NW
330 Granite NW
Request Permanent C.O. - Accepted
Engineers Stamp Date 9/12/14 (J14D171)
Certification Dated: 8/28/15**

Dear Mr. Lorenz,

Based on the Certification received 8/31/2015, the site is acceptable for permanent release of Certificate of Occupancy by Hydrology.

If you have any questions please contact me at 924-3985 or Totten Elliott at 924-3982.

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

TE/SB
C: File

Sincerely,

Shahab Biazar, P.E.
City Engineer
Planning and Development Services

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY
NOTICE TO CONTRACTOR

1. AN EXCAVATION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION", 1986 EDITION, AS AMENDED THROUGH UPDATE NO. 7.
3. THREE WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT LINE LOCATING SERVICE.
765-1234 FOR THE LOCATION OF EXISTING UTILITIES.
4. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATIONS OF ALL CONDUITS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
5. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
6. MAINTENANCE OF THE FACILITY SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY BEING SERVED.
7. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

APPROVALS: _____
INSPECTOR _____ DATE _____

IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE DRAINAGE ORDINANCE, EFFECTIVE MAY 12, 2014, ALL NEW DEVELOPMENT PROJECTS ARE REQUIRED TO MANAGE THE RUNOFF WHICH OCCURS DURING THE 90TH PERCENTILE STORM EVENT. IN ORDER TO COMPLY WITH THIS CRITERIA, WHERE PRACTICAL, ALL SURFACE DRAINAGE SHALL BE ROUTED THROUGH LANDSCAPED AREAS BEFORE RELEASE INTO DOWNSIDE DRAINAGE FACILITIES. THIS PLAN RECOMMENDS ALL LANDSCAPED AREAS BE DEPRESSED A MINIMUM OF 3-INCHES BELOW THE ADJACENT PAVED SURFACE TO RETAIN THE FIRST FLUSH RUNOFF.

ANTHEA - 4TH AND GRANITE
ENGINEER'S CERTIFICATION (HYDROLOGY) FOR TEMPORARY CERTIFICATE OF OCCUPANCY

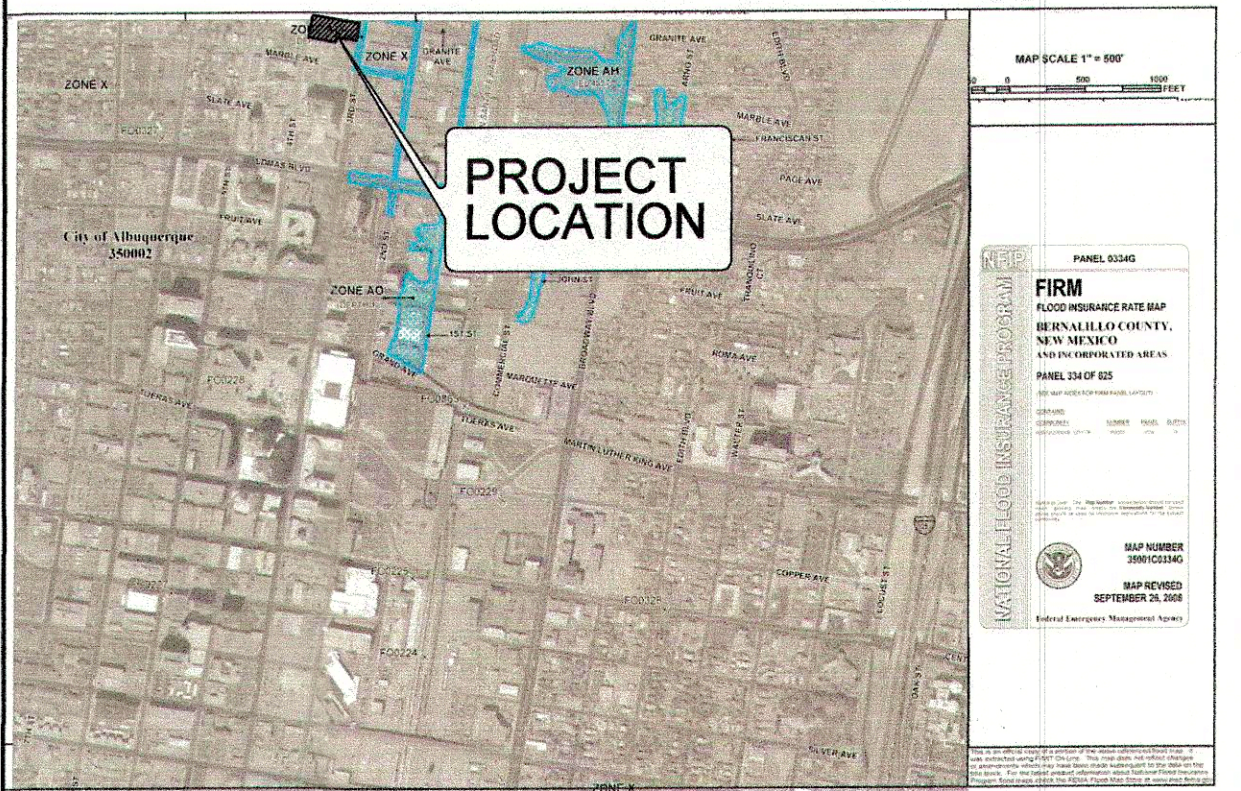
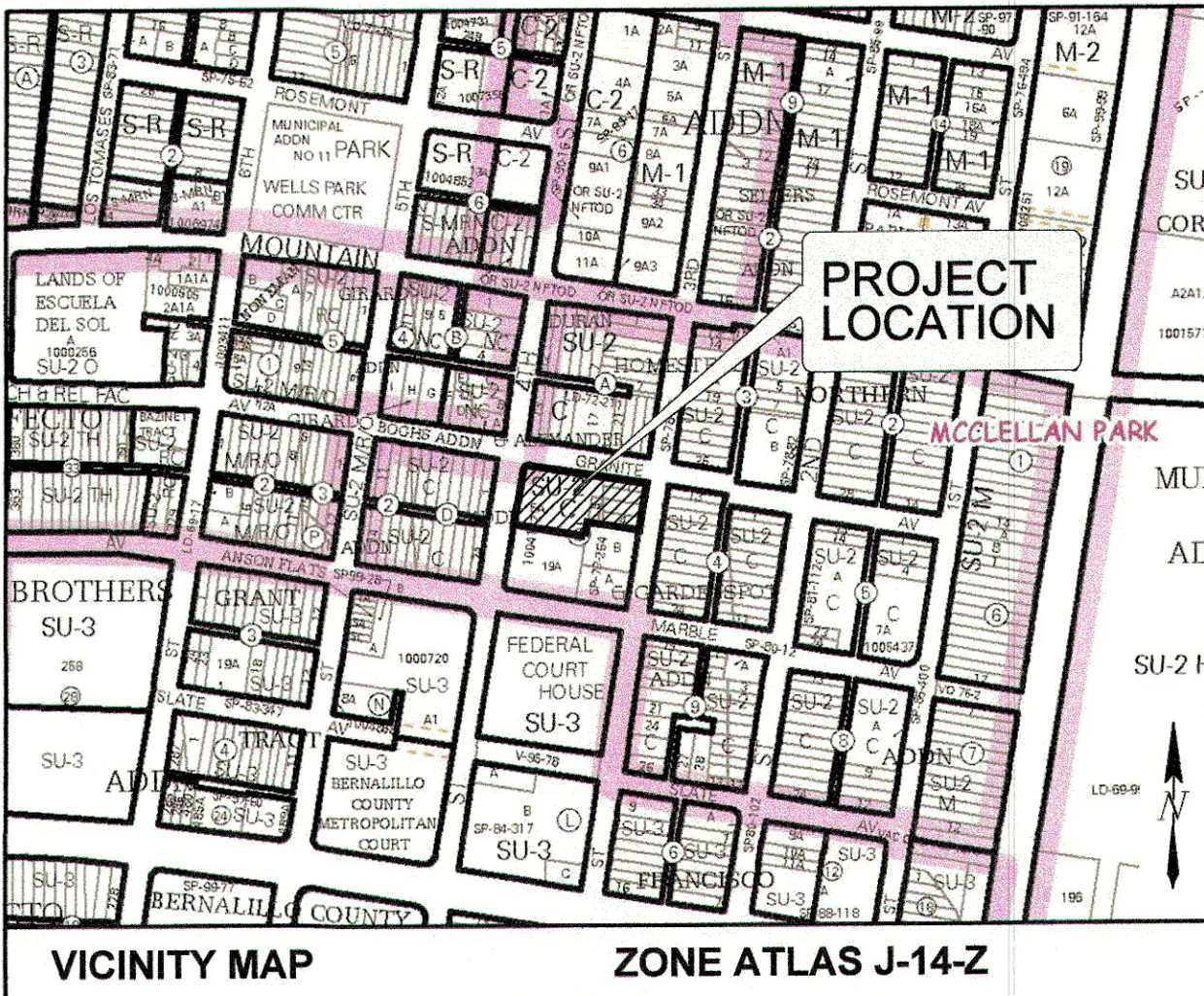
I, Dennis A. Lorenz, NMPE 9647, of the firm Lorenz Design & Consulting, LLC, hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan, dated 09-12-2014.

The record information edited onto the original design document has been provided to me by Fierro & Company, Robert Fierro, PE & NMPLS No. 22909, as supplemental data to the original topographic survey, and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Temporary Certificate of Occupancy.

The following items must be completed before a Permanent C.O. is issued:

1. Landscaping improvements shall be modified to retain the First Flush volume per the Drainage Ordinance.

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.



GRADING AND DRAINAGE PLAN

PURPOSE AND SCOPE

Pursuant to the Drainage Ordinance for 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 construction of an 29,600 square foot building with paving, landscaping, utility, grading, and drainage improvements to support the project. The scope of this plan is to present 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 purpose of this plan is to support building permit application.

EXISTING CONDITIONS

The property is located at 330 Granite Avenue NW, between Third and Fourth Streets NW. The site is presently utilized as a parking lot. Existing site improvements consist of gravel surfacing. No buildings or permanent structures exist on the property. The site is extremely flat, with very little positive drainage in any direction. Excess runoff generally flows to the perimeter streets. Public storm drains exist in Third and Fourth Streets. The site is surrounded on three sides by public roadways. A paved parking lot and commercial development are located adjacent to the property on the south. No significant off-site flows impact the site.

As shown by the attached Firm Panel, the site does not lie within a mapped 100 year Flood Zone. Portions of Third Street adjacent to the site are mapped as a Zone AO depth 1' Floodzone.

PROPOSED IMPROVEMENTS

As stated above, the project consists of the construction of an 29,600 square foot building with paving, landscaping, utility, grading, and drainage improvements. Where practical all developed runoff will be routed through landscaping to capture the first flush before release into the perimeter streets. All excess runoff will be collected by the existing public storm drain system located in Third and Fourth Streets.

Due to limited capacity of the existing public storm drainage system the City Hydrology Department has established a 2.75 cfs per acre maximum discharge rate for this site. Therefore, the site will implement detention ponding to limit developed discharge to 2.36 cfs for the project. This will be accomplished by utilizing a Type 'D' inlet in the parking lot near the northeast corner of the site. The inlet will drain to an existing public inlet located in Granite Avenue. An 10-inch drainline will be connected to the existing public inlet, restricting discharge to 2.36 cfs. The northeast corner of the proposed parking lot will serve as a detention pond for during heavy rains. A curb blockout will be provided at Third Street as a spillway should the pond overflow.

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

CALCULATIONS

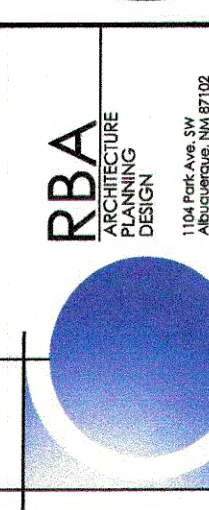
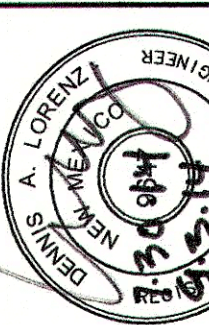
The calculations shown hereon define the 100-year/6 hour design storm falling within the project area under existing and proposed conditions. The hydrology is per "Section 22.2, Part A, Development Process Manual, Vol 2", dated June 1997.

LORENZ
DESIGN & CONSULTING, LLC
Civil Engineering & Construction Management

2501 Rio Grande Blvd NW Suite A Albuquerque, New Mexico 87104
Ph: 505-968-9288 Fax: 505-968-9655

ANTHEA 4TH AND GRANITE
GRADING AND DRAINAGE PLAN
ALBUQUERQUE, NM
PROJECT #14-009

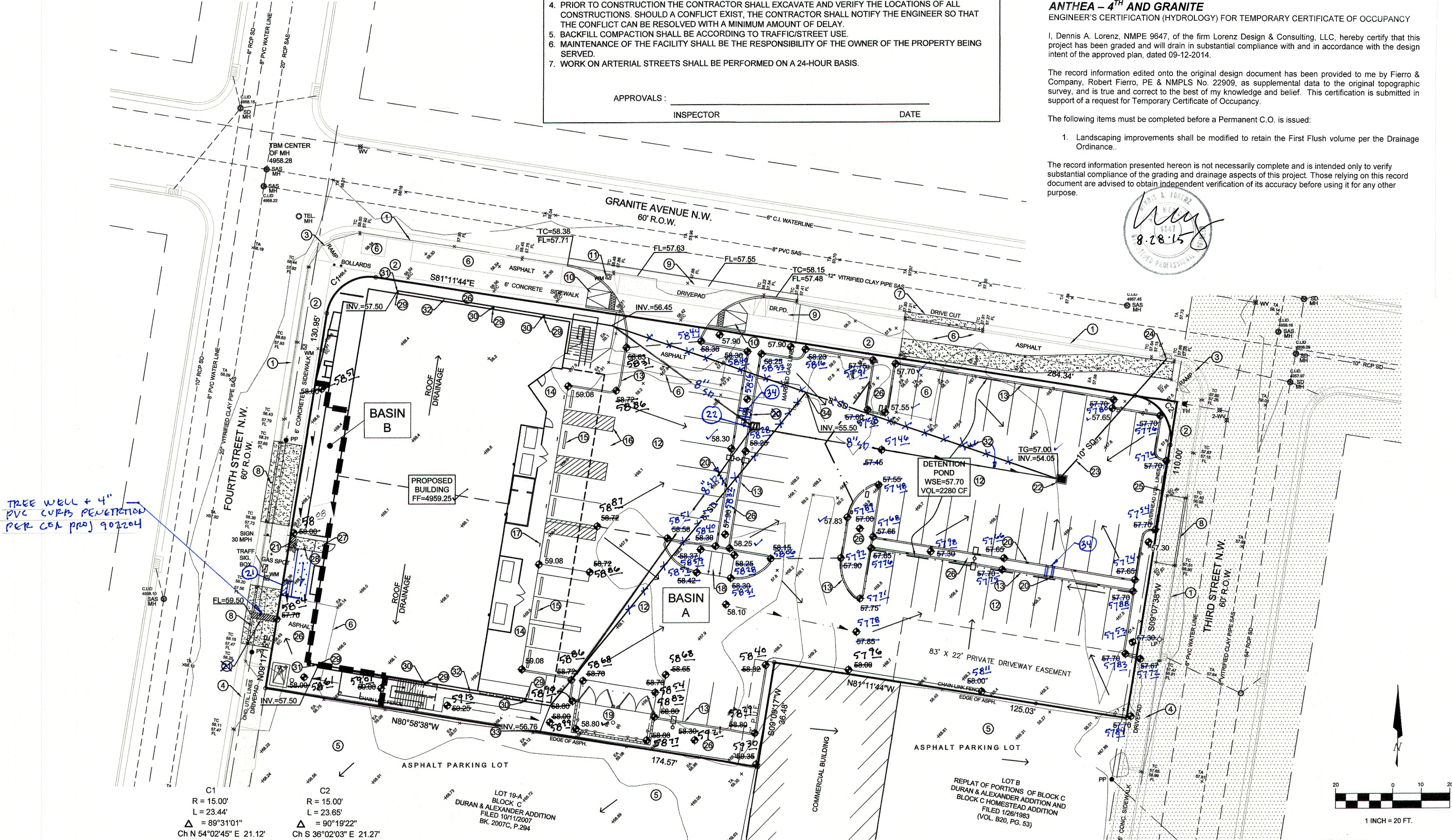
REVISION DATE
09/03/2014
COA COMMENTS
09/12/2014



DATE
09/12/2014

SHEET NUMBER

C-1.0



KEYED NOTES

- EXISTING CONCRETE STANDARD CURB AND GUTTER.
- EXISTING PUBLIC SIDEWALK TO REMAIN.
- EXISTING HANDICAP RAMP.
- EXISTING DRIVEPAD TO REMAIN.
- EXISTING ASPHALT PAVEMENT.
- REMOVE & DISPOSE EXISTING ASPHALT.
- REMOVE & DISPOSE EXISTING RUNDOWN C&G. REPLACE WITH STANDARD C&G PER COA STD DWG 2415A.
- REMOVE & DISPOSE EXISTING RUNDOWN C&G AND DRIVEPAD. REPLACE WITH STANDARD C&G PER AND 6' SIDEWALK PER COA STD DWG 2415A AND 2430.
- REMOVE & DISPOSE EXISTING CONCRETE C&G, SIDEWALK AND DRIVEPADS. CONSTRUCT NEW CONCRETE DRIVEWAY PER DETAIL A/C-2.0.
- CONSTRUCT NEW HANDICAP RAMPS PER DETAIL A/C-2.0.
- REMOVE AND SLAVE EXISTING WATER SERVICE. SEE SITE UTILITY PLAN.
- NEW ASPHALT PAVEMENT.
- NEW 6" CONCRETE CURB.
- NEW CONCRETE TURNDOWN SIDEWALK FLUSH WITH ASPHALT.
- INSTALL CONCRETE TIRE STOP - TYPICAL.
- PROVIDE HANDICAP AND ACCESSIBLE LOADING AREA STRIPING PER CODE - TYPICAL.
- INSTALL HANDICAP SIGNAGE PER CODE - TYPICAL. SEE DETAIL B/C-2.0.
- CONSTRUCT ASPHALT MOTORCYCLE PARKING SPACES.
- CONSTRUCT NEW REFUSE ENCLOSURE. SEE SITE PLAN FOR DETAILS.
- CONSTRUCT 12 INCH WIDE CURB BLOCK OUT AT ALTERNATING PARKING SPACES FOR SURFACE DRAINAGE.
- CONSTRUCT 12-INCH SIDEWALK CULVERT PER COA STD DWG 2236.
- CONSTRUCT TYPE 'D' INLET SINGLE GRATE PER COA STD DWG 2206.
- CONSTRUCT 10-INCH PRIVATE PVC STORM DRAIN AT S=1.00%.
- CONNECT 10-INCH PVC STORM DRAIN TO EXISTING DROP INLET PER COA STD DWG 2237. INV. = 4953.5±.
- CONSTRUCT POND OVERFLOW WEIR. SEE DETAIL D/C-2.0.
- NEW LANDSCAPING. SEE LANDSCAPE PLAN.
- 4'x4' LANDING AT MANDOOK.
- 4' ADA RAMP AT 1:12 MAX.
- 6"x6" DOWNSPOUT (TYP.).
- 6"x6" PVC DOWNSPOUT ADAPTER WITH 8"x8"x8" TEE.
- 6"x6"x8" PVC DOWNSPOUT ADAPTER WITH 8"x90" BEND.
- 8" PVC STORM DRAIN.
- 8"-60" PVC BEND.

LEGEND

ITEM	EXISTING	PROPOSED
CURB AND GUTTER		
HEADER CURB		
CURB ELEVATIONS		
SPOT ELEV.		16.7
RIGHT OF WAY		
EASEMENT		
CENTERLINE		
TOP OF ASPHALT ELEV.	TA 16.2	TA 16.2
FLOWLINE ELEV.	EX FL 16.2	FL 16.2
FUTURE CURB AND GUTTER (N.I.C.)		
NEW PAVING		
DRAINAGE SWALE		
DIRECTION OF FLOW		
100 YEAR FLOOD HAZARD ZONE		
STORM INLET		
DRAINAGE BASIN DIVIDE		

DRAINAGE PLAN NOTES

- LDC recommends that the Owner obtain a Geotechnical Evaluation of the on-site soils prior to foundation/structural design.
- 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.
- 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.
- 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.
- 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.
- LDC recommends that the Owner obtain the services of a Geotechnical Engineer to test and inspect all earthwork aspects of the project.
- 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.
- All spot elevations are finished grade or top of pavement, unless noted otherwise.
- The City of Albuquerque has received its EPA MS4 Permit for stormwater quality with an effective date of March 1, 2012.

PROJECT DATA

PROPERTY ADDRESS:

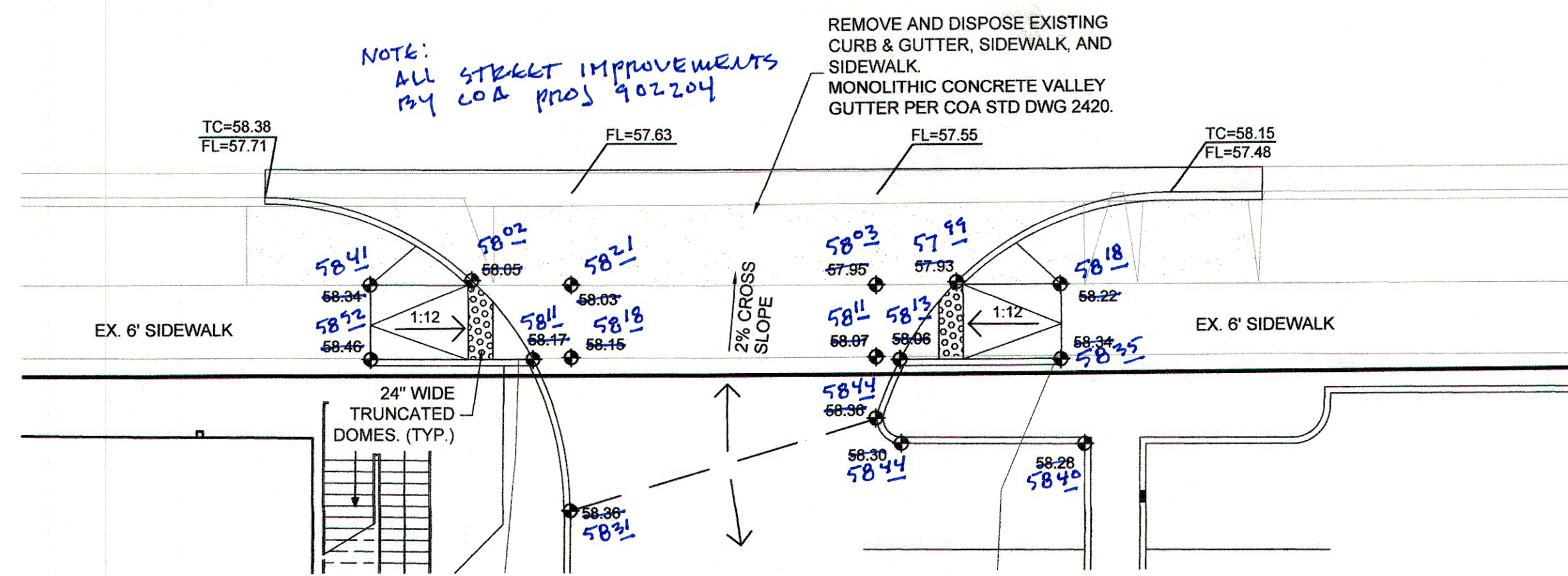
330 GRANITE NW
ALBUQUERQUE, NM 87103

LEGAL DESCRIPTION:

LOT 5A, BLOCK C, DURAN & ALEXANDER ADDITION
LOTS 1 & 2, BLOCK C, HOMESTEAD GARDEN ADDITION

PROJECT HYDROLOGY									
AHYMO									
Anthea									
EXISTING CONDITIONS									
BASIN	AREA (ac)	A (ac)	B (ac)	C (ac)	D (ac)	E	Q (cfs)	VOL (ac ft)	
SITE	0.86	0.00	0.00	0.00	0.86	0.00	1.13	2.70	0.081
PROPOSED CONDITIONS									
BASIN	AREA (ac)	A (ac)	B (ac)	C (ac)	D (ac)	E	Q (cfs)	VOL (ac ft)	
SITE	0.86	0.00	0.07	0.07	0.72	1.93	3.76	0.138	
A	0.82	0.00	0.07	0.04	0.71	1.96	3.62	0.134	
B	0.04	0.00	0.00	0.03	0.01	1.38	0.14	0.005	

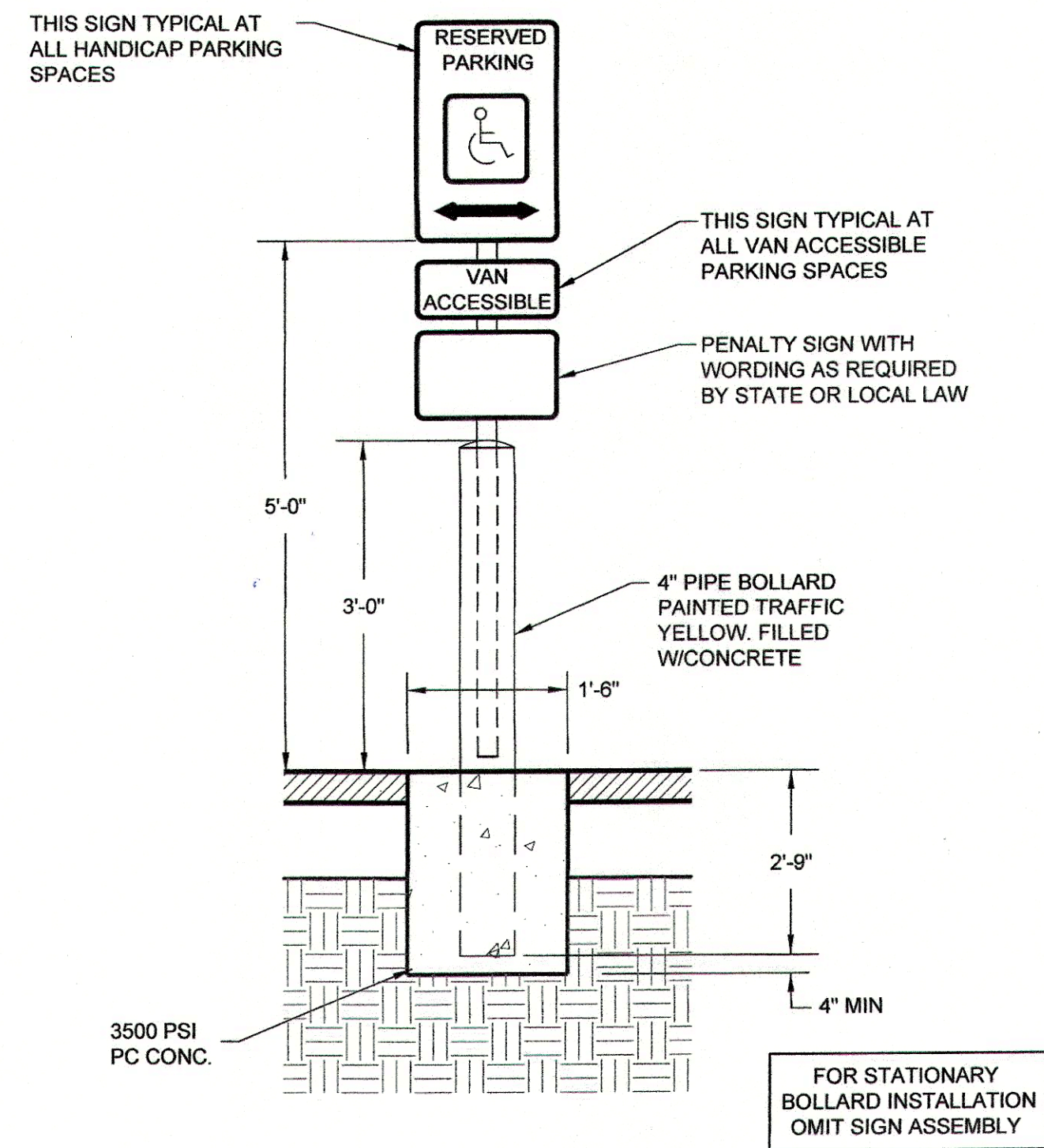
GRANITE AVENUE N.W. 60' R.O.W.



GRANITE ENTRY DETAIL

NTS

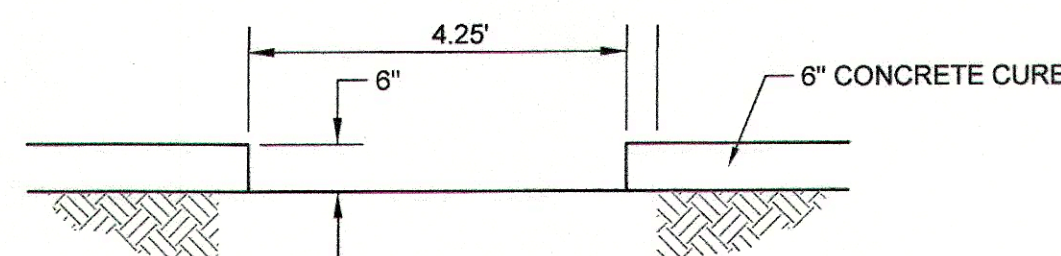
A
C-2.0



HC SIGN ASSEMBLY / BOLLARD DETAIL

NTS

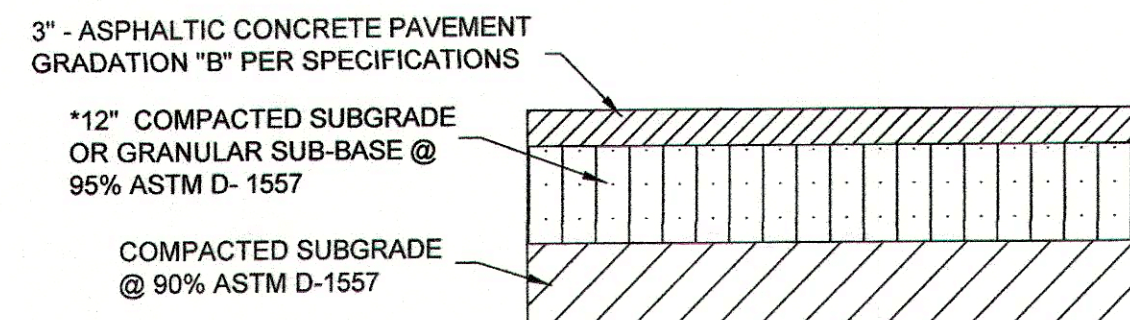
B
C-2.0



POND OVERFLOW WEIR SECTION

NTS

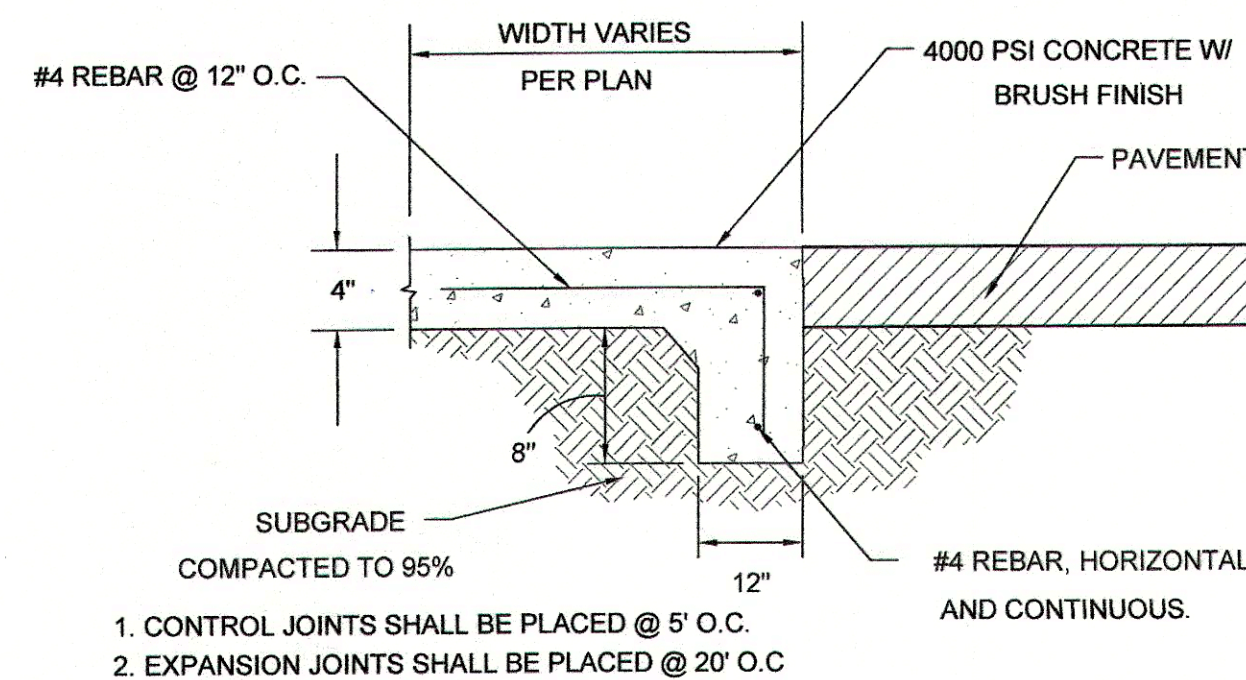
D
C-2.0



ASPHALT PAVEMENT

NTS

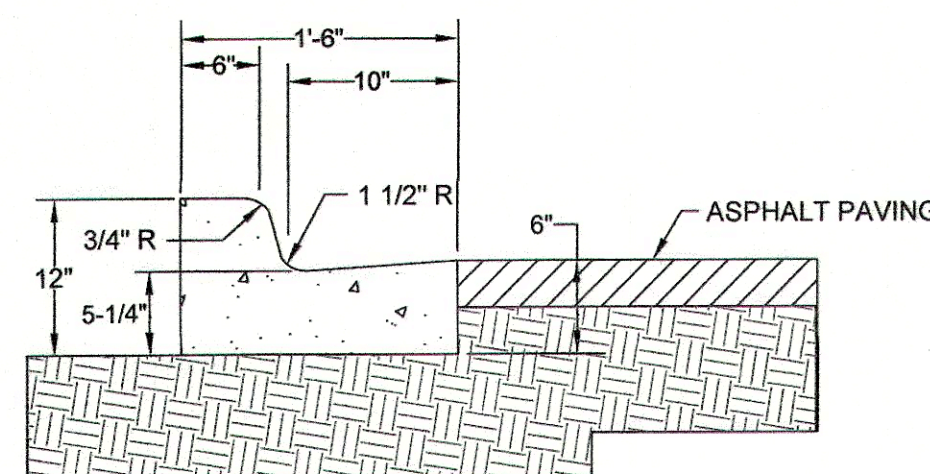
E
C-2.0



TURN DOWN SIDEWALK AT ACCESSIBLE ZONES

NTS

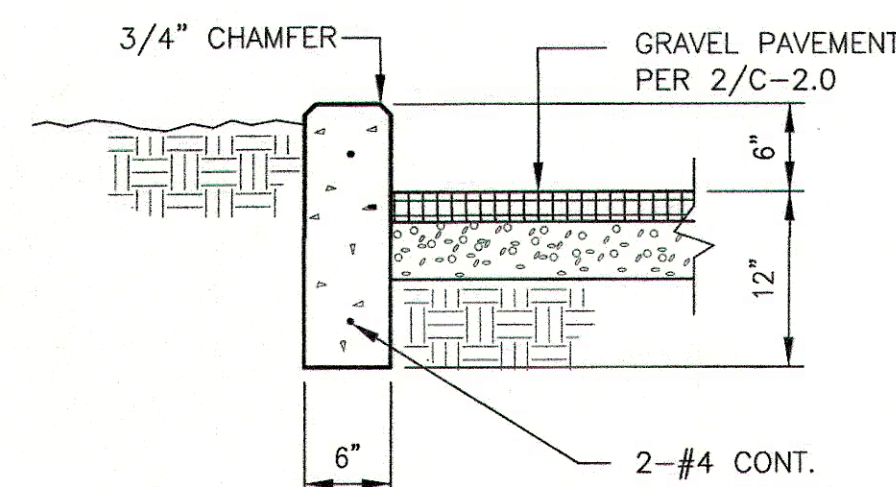
F
C-2.0



CONCRETE CURB AND GUTTER

NTS

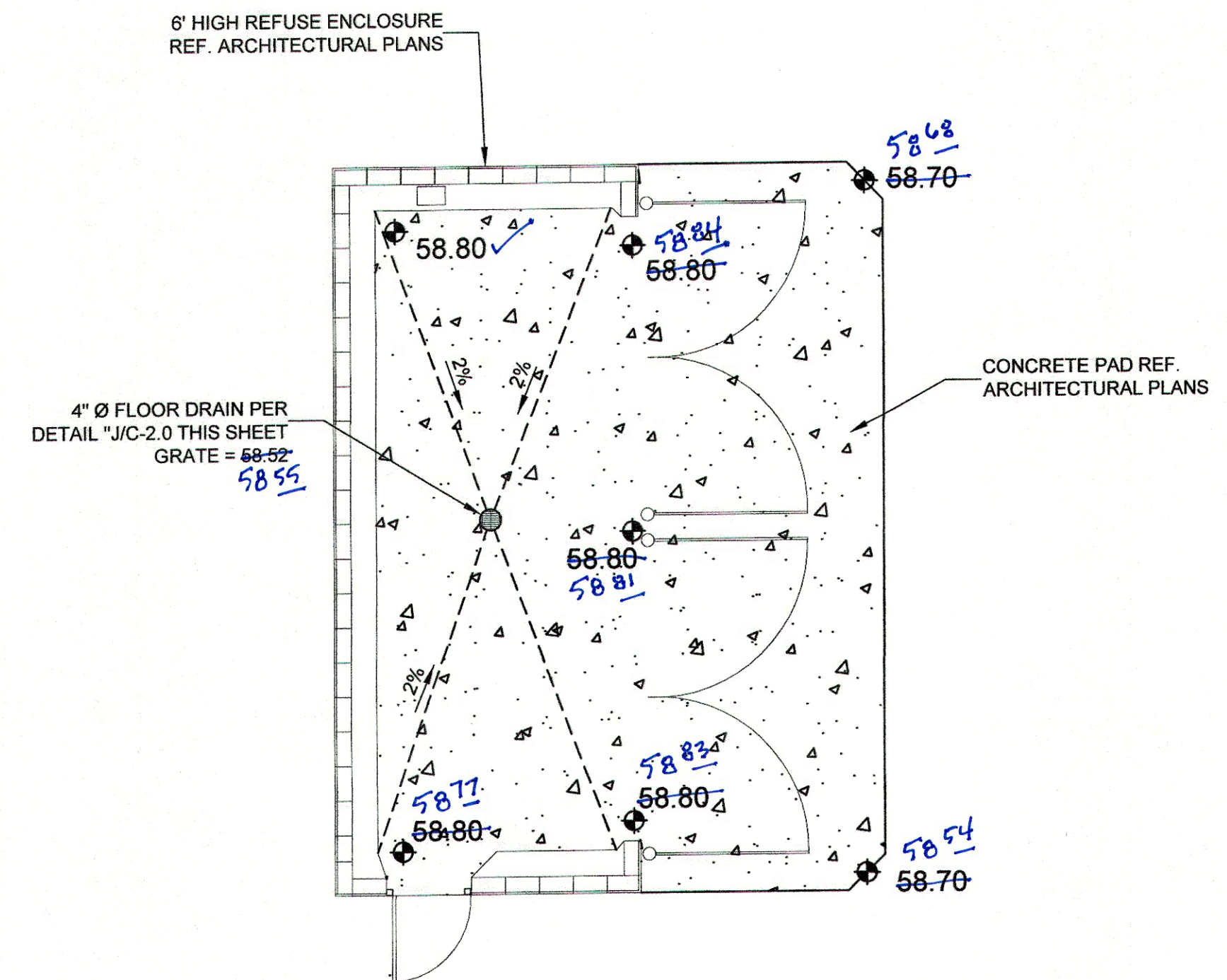
G
C-2.0



HEADER CURB DETAIL

NTS

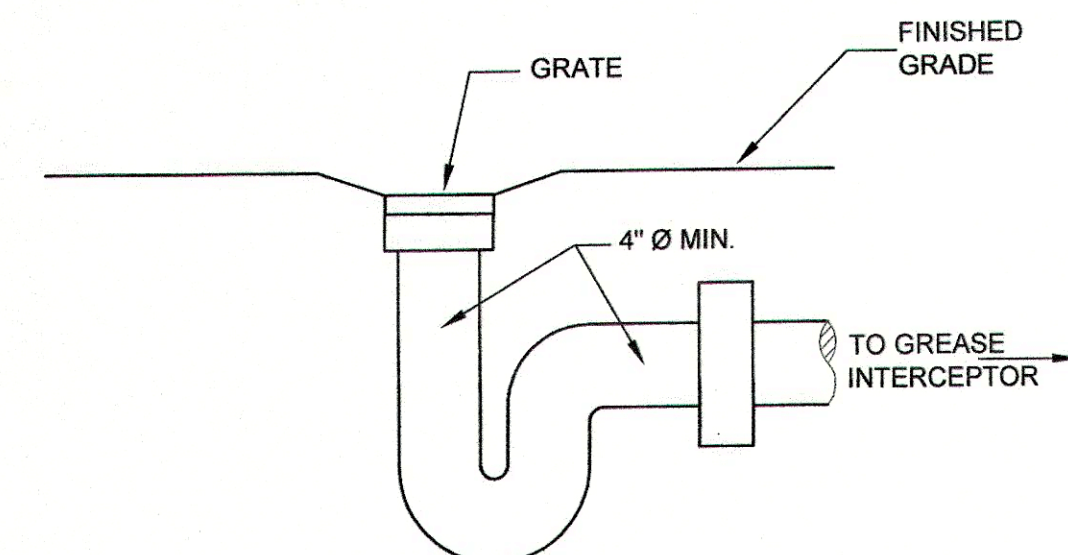
H
C-2.0



REFUSE ENCLOSURE DETAIL

NTS

I
C-2.0



4" SANITARY SEWER DRAIN FOR REFUSE ENCLOSURE

NTS

J
C-2.0

ANTHEA - 4TH AND GRANITE ENGINEER'S CERTIFICATION (HYDROLOGY) FOR TEMPORARY CERTIFICATE OF OCCUPANCY

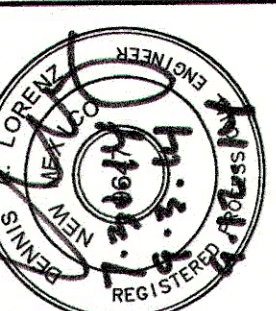
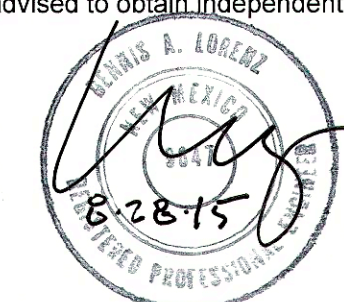
I, Dennis A. Lorenz, NMPE 9647, of the firm Lorenz Design & Consulting, LLC, hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan, dated 09-12-2014.

The record information edited onto the original design document has been provided to me by Fierro & Company, Robert Fierro, PE & NMPLS No. 22909, as supplemental data to the original topographic survey, and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Temporary Certificate of Occupancy.

The following items must be completed before a Permanent C.O. is issued:

1. Landscaping improvements shall be modified to retain the First Flush volume per the Drainage Ordinance.

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 AND TRANSPORTATION INFORMATION SHEET

(REV 04/2009)

PROJECT TITLE: ANTHEA – 4th at GRANITE NW ZONE MAP: J-14/D171
DRB#: 14-DRB-70196 EPC#: NA WORK ORDER#: NA

LEGAL DESCRIPTION: LOT 5A, BLOCK C, DURNA & ALEXANDER ADDN and
LOT 2, BLOCK C, HOMESTEAD & GARDENSPOT ADDN
CITY ADDRESS: 330 GRANITE NW

ENGINEERING FIRM: LORENZ DESIGN & CONSULTING CONTACT: DENNIS LORENZ
ADDRESS: 2501 RIO GRANDE BLVD. NW SUITE A PHONE: 888-6088
CITY, STATE: ALBUQUERQUE, NEW MEXICO ZIP CODE: 87104

OWNER: CONSTRUCT SOUTHWEST CONTACT: BILL SMITH
ADDRESS: 333 RIO RANCHO BLVD NE PHONE: 891-3695
CITY, STATE: RIO RANCHO, NEW MEXICO ZIP CODE: 87123

ARCHITECT: RICK BENNETT ARCHITECTS CONTACT: R. BENNETT
ADDRESS: 1104 PARK AVENUE SW PHONE: 242-1859
CITY, STATE: ALBUQUERQUE, NEW MEXICO ZIP CODE: 87103

SURVEYOR: FEIRRO & COMPANY CONTACT: R. FIERRO
ADDRESS: 2929 COORS NW PHONE: 352-8930
CITY, STATE: ALBUQUERQUE, NM ZIP CODE: 87120

CONTRACTOR: CONSTRUCT SOUTHWEST CONTACT: BILL SMITH
ADDRESS: 333 RIO RANCHO BLVD NE PHONE: 891-3695
CITY, STATE: RIO RANCHO, NEW MEXICO ZIP CODE: 87123

TYPE OF SUBMITTAL:

☐ DRAINAGE REPORT
☐ DRAINAGE PLAN 1st SUBMITTAL
☐ DRAINAGE PLAN RESUBMITTAL
☐ CONCEPTUAL G & D PLAN
☐ GRADING PLAN
☐ EROSION CONTROL PLAN
☒ ENGINEER'S CERT (HYDROLOGY)
☐ CLOMR/LOMR
☐ TRAFFIC CIRCULATION LAYOUT
☐ ENGINEER'S CERT (TCL)
☐ ENGINEER'S CERT (DRB SITE PLAN)
☐ OTHER (SPECIFY)

CHECK TYPE OF APPROVAL SOUGHT:

☐ SIA/FINANCIAL GUARANTEE RELEASE
☐ PRELIMINARY PLAT APPROVAL
☐ S. DEV. PLAN FOR SUB'D APPROVAL
☐ S. DEV. FOR BLDG. PERMIT APPROVAL
☐ SECTOR PLAN APPROVAL
☐ FINAL PLAT APPROVAL
☐ FOUNDATION PERMIT APPROVAL
☐ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY (PERM)
☒ CERTIFICATE OF OCCUPANCY (TEMP)
☐ GRADING PERMIT APPROVAL
☐ PAVING PERMIT APPROVAL
☐ WORK ORDER APPROVAL
☐ GRADING CERTIFICATION
☐ OTHER (SPECIFY) SO-19

WAS A PRE-DESIGN CONFERENCE ATTENDED:

☐ YES
☐ NO
☐ COPY PROVIDED

DATE SUBMITTED: 8-28-2015 BY: DENNIS A. LORENZ

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
3. **Drainage Report:** Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more.