

The site plan for FF5244.54 is bounded by Coal Avenue to the north and Jefferson Street to the east. The plan includes several basins (BASIN A, BASIN B, BASIN C, BASIN D, BASIN E, BASIN F, BASIN G, BASIN H, BASIN I, BASIN J, BASIN K, BASIN L, BASIN M, BASIN N, BASIN O, BASIN P, BASIN Q, BASIN R, BASIN S, BASIN T, BASIN U, BASIN V, BASIN W, BASIN X, BASIN Y, BASIN Z) and ponds (POND A, POND B, POND C, POND D, POND E, POND F, POND G, POND H, POND I, POND J, POND K, POND L, POND M, POND N, POND O, POND P, POND Q, POND R, POND S, POND T, POND U, POND V, POND W, POND X, POND Y, POND Z). The plan also shows various elevation points (e.g., 5242.0, 5243.0, 5244.0, 5245.0, 5246.0, 5247.0, 5248.0, 5249.0, 5250.0, 5251.0, 5252.0, 5253.0, 5254.0, 5255.0, 5256.0, 5257.0, 5258.0, 5259.0, 5260.0, 5261.0, 5262.0, 5263.0, 5264.0, 5265.0, 5266.0, 5267.0, 5268.0, 5269.0, 5270.0, 5271.0, 5272.0, 5273.0, 5274.0, 5275.0, 5276.0, 5277.0, 5278.0, 5279.0, 5280.0, 5281.0, 5282.0, 5283.0, 5284.0, 5285.0, 5286.0, 5287.0, 5288.0, 5289.0, 5290.0, 5291.0, 5292.0, 5293.0, 5294.0, 5295.0, 5296.0, 5297.0, 5298.0, 5299.0, 5300.0, 5301.0, 5302.0, 5303.0, 5304.0, 5305.0, 5306.0, 5307.0, 5308.0, 5309.0, 5310.0, 5311.0, 5312.0, 5313.0, 5314.0, 5315.0, 5316.0, 5317.0, 5318.0, 5319.0, 5320.0, 5321.0, 5322.0, 5323.0, 5324.0, 5325.0, 5326.0, 5327.0, 5328.0, 5329.0, 5330.0, 5331.0, 5332.0, 5333.0, 5334.0, 5335.0, 5336.0, 5337.0, 5338.0, 5339.0, 5340.0, 5341.0, 5342.0, 5343.0, 5344.0, 5345.0, 5346.0, 5347.0, 5348.0, 5349.0, 5350.0, 5351.0, 5352.0, 5353.0, 5354.0, 5355.0, 5356.0, 5357.0, 5358.0, 5359.0, 5360.0, 5361.0, 5362.0, 5363.0, 5364.0, 5365.0, 5366.0, 5367.0, 5368.0, 5369.0, 5370.0, 5371.0, 5372.0, 5373.0, 5374.0, 5375.0, 5376.0, 5377.0, 5378.0, 5379.0, 5380.0, 5381.0, 5382.0, 5383.0, 5384.0, 5385.0, 5386.0, 5387.0, 5388.0, 5389.0, 5390.0, 5391.0, 5392.0, 5393.0, 5394.0, 5395.0, 5396.0, 5397.0, 5398.0, 5399.0, 5400.0, 5401.0, 5402.0, 5403.0, 5404.0, 5405.0, 5406.0, 5407.0, 5408.0, 5409.0, 5410.0, 5411.0, 5412.0, 5413.0, 5414.0, 5415.0, 5416.0, 5417.0, 5418.0, 5419.0, 5420.0, 5421.0, 5422.0, 5423.0, 5424.0, 5425.0, 5426.0, 5427.0, 5428.0, 5429.0, 5430.0, 5431.0, 5432.0, 5433.0, 5434.0, 5435.0, 5436.0, 5437.0, 5438.0, 5439.0, 5440.0, 5441.0, 5442.0, 5443.0, 5444.0, 5445.0, 5446.0, 5447.0, 5448.0, 5449.0, 5450.0, 5451.0, 5452.0, 5453.0, 5454.0, 5455.0, 5456.0, 5457.0, 5458.0, 5459.0, 5460.0, 5461.0, 5462.0, 5463.0, 5464.0, 5465.0, 5466.0, 5467.0, 5468.0, 5469.0, 5470.0, 5471.0, 5472.0, 5473.0, 5474.0, 5475.0, 5476.0, 5477.0, 5478.0, 5479.0, 5480.0, 5481.0, 5482.0, 5483.0, 5484.0, 5485.0, 5486.0, 5487.0, 5488.0, 5489.0, 5490.0, 5491.0, 5492.0, 5493.0, 5494.0, 5495.0, 5496.0, 5497.0, 5498.0, 5499.0, 5500.0, 5501.0, 5502.0, 5503.0, 5504.0, 5505.0, 5506.0, 5507.0, 5508.0, 5509.0, 5510.0, 5511.0, 5512.0, 5513.0, 5514.0, 5515.0, 5516.0, 5517.0, 5518.0, 5519.0, 5520.0, 5521.0, 5522.0, 5523.0, 5524.0, 5525.0, 5526.0, 5527.0, 5528.0, 5529.0, 5530.0, 5531.0, 5532.0, 5533.0, 5534.0, 5535.0, 5536.0, 5537.0, 5538.0, 5539.0, 5540.0, 5541.0, 5542.0, 5543.0, 5544.0, 5545.0, 5546.0, 5547.0, 5548.0, 5549.0, 5550.0, 5551.0, 5552.0, 5553.0, 5554.0, 5555.0, 5556.0, 5557.0, 5558.0, 5559.0, 5560.0, 5561.0, 5562.0, 5563.0, 5564.0, 5565.0, 5566.0, 5567.0, 5568.0, 5569.0, 5570.0, 5571.0, 5572.0, 5573.0, 5574.0, 5575.0, 5576.0, 5577.0, 5578.0, 5579.0, 5580.0, 5581.0, 5582.0, 5583.0, 5584.0, 5585.0, 5586.0, 5587.0, 5588.0, 5589.0, 5590.0, 5591.0, 5592.0, 5593.0, 5594.0, 5595.0, 5596.0, 5597.0, 5598.0, 5599.0, 5600.0, 5601.0, 5602.0, 5603.0, 5604.0, 5605.0, 5606.0, 5607.0, 5608.0, 5609.0, 5610.0, 5611.0, 5612.0, 5613.0, 5614.0, 5615.0, 5616.0, 5617.0, 5618.0, 5619.0, 5620.0, 5621.0, 5622.0, 5623.0, 5624.0, 5625.0, 5626.0, 5627.0, 5628.0, 5629.0, 5630.0, 5631.0, 5632.0, 5633.0, 5634.0, 5635.0, 5636.0, 5637.0, 5638.0, 5639.0, 5640.0, 5641.0, 5642.0, 5643.0, 5644.0, 5645.0, 5646.0, 5647.0, 5648.0, 5649.0, 5650.0, 5651.0, 5652.0, 5653.0, 5654.0, 5655.0, 5656.0, 5657.0, 5658.0, 5659.0, 5660.0, 5661.0, 5662.0, 5663.0, 5664.0, 5665.0, 5666.0, 5667.0, 5668.0, 5669.0, 5670.0, 5671.0, 5672.0, 5673.0, 5674.0, 5675.0, 5676.0, 5677.0, 5678.0, 5679.0, 5680.0, 5681.0, 5682.0, 5683.0, 5684.0, 5685.0, 5686.0, 5687.0, 5688.0, 5689.0, 5690.0, 5691.0, 5692.0, 5693.0, 5694.0, 5695.0, 5696.0, 5697.0, 5698.0, 5699.0, 5700.0, 5701.0, 5702.0, 5703.0, 5704.0, 5705.0, 5706.0, 5707.0, 5708.0, 5709.0, 5710.0, 5711.0, 5712.0, 5713.0, 5714.0, 5715.0, 5716.0, 5717.0, 571

## SITE GRADING, DRAINAGE & PAVING

- SITE WATER AND SEWER 

- NOTE: SEE ARCHITECTURAL SITE PLAN FOR SITE DIMENSIONS.

LOT A, BLOCK 11, VALLEY VIEW ADDITION

ACS 6-K17      ELEVATION 5202.273      NAVD 88

The map displays a grid of land parcels, each labeled with a zoning code and a parcel number. Key features include:

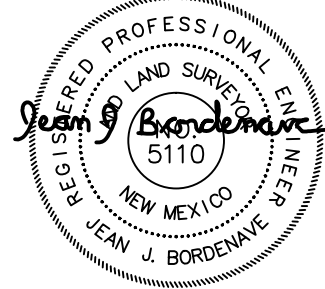
- Streets:** Highland Avenue (top), Juniper Avenue (middle), and Highland High School (bottom right).
- Zoning Codes:** C-1, C-2, C-3, R-1, R-2, R-3, ADDN, and others.
- Parcel Numbers:** Various numbers are scattered throughout the map, such as 1007437, 1007438, 1007439, etc.
- Site Identification:** A specific parcel is highlighted in purple and labeled 'SITE'.
- Other Labels:** 'HIGHLAND HIGH SCHOOL', 'JUNIPER AVE', 'HIGHLAND AVE', and 'HIGHLAND PARK' are visible.

This aerial map of the Highland area in San Francisco shows a grid of streets including Highland Ave, Silver Ave, Coal Ave, and Lead Ave. A red dashed line outlines a specific area labeled 'SITE'. Other labels include 'Highland Pond', 'ZONE X', 'ZONE AI', and 'ZONE X'. The map also shows various buildings, trees, and a 'WATER TOWER' in the upper left corner.

I, JEAN J. BORDENAVE, NMPE&LS NO. 5110, OF THE FIRM BORDENAVE DESIGNS, 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 SEP. 22, 2011. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY ME OR UNDER MY DIRECT SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR CERTIFICATE OF OCCUPANCY.

EXCEPTIONS AND/OR QUALIFICATIONS:  
ALL 3 PONDS ELIMINATED. LITTLE IMPACT ON FIRST FLUSH FLOWS AS 2 OF THE PONDS DIDN'T INTERCEPT FLOWS FROM IMPERVIOUS SURFACES AND THIRD POND ELIMINATED DUE TO TRANSFORMER INSTALLATION.

THE RECORD INFORMATION PRESENTED ON THE EDITED DESIGN DOCUMENT IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THE EDITED DESIGN DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.



BM	TEMPORARY BENCHMARK
FF	FINISH FLOOR
FG	FINISH GRADE
FL	FLOWLINE
TA	TOP OF ASPHALT
TC	TOP OF CONCRETE
BC	TOP BACK OF CURB
TP	TOP OF EARTH PAD
TS	TOP OF SIDEWALK
TW	TOP OF WALL
FH	FIRE HYDRANT
WM	WATER METER

1. THE SITE IS PRESENTLY VACANT, SLOPES GENTLY DOWNWARD TO THE WEST AND VEGETATION IS SPARSE. THE PROPOSED USE IS MULTIFAMILY RESIDENTIAL WITH MOST OF THE SITE BEING IMPERVIOUS SURFACES AND PERIMETER LANDSCAPING.
2. THE PEAK DISCHARGE RATE WILL INCREASE BY 1.01 AND 1.06 CFS FOR THE 10 YEAR AND 100 YEAR STORMS RESPECTIVELY AND THE 6 HOUR RUNOFF VOLUME FOR THE 10 YEAR AND 100 YEAR STORM WILL INCREASE BY 1583 AND 2097 CUBIC FEET RESPECTIVELY.

ALL DRAINAGE WILL BE DIRECTED TO THE ADJUTING STREETS VIA ASPHALT OR CONCRETE SURFACES

3. THE SITE IS LOCATED IN A 'ZONE X' PER FEMA FIRM MAP NO. 354, DATED SEPTEMBER, 2008.
4. TOPO SURVEY DATA SHOWN ON THIS DRAWING WAS OBTAINED BY CONSTRUCTION SURVEY TECHNOLOGIES, INC., DATED JUNE, 2011.

1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO PUBLIC RIGHT-OF-WAY OR PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY THE CONSTRUCTION OF TEMPORARY SOIL BERMS OR SILT FENCES AT PROPERTY LINES AND WETTING SOIL TO PREVENT IT FROM BLOWING. IF THE SITE IS CONTROLLED BY A SWPPP PLAN, EROSION CONTROL SHALL BE ACCOMPLISHED ACCORDING TO THE PLAN.

1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT THE NEW MEXICO ONE CALL SYSTEM AT 260-1990 FOR LOCATION OF EXISTING UTILITIES.

2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL OBSTRUCTIONS. IF ANY CONFLICTS EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.

3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.

4. ALL CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE COMPLETED IN ACCORDANCE WITH THE APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.

THERE ARE NO OFFSITE FLOWS ENTERING THE PROPOSED PROJECT

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
2. ALL WORK WITHIN THE CITY RIGHT-OF-WAY, DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE SPECIFIED OR PROVIDED HEREIN, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 THRU UPDATE NO. 8.
3. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL POTENTIAL OBSTRUCTIONS. 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 IN ACCORDANCE WITH ARTERIAL STREET USE.
6. MAINTENANCE OF THE SIDEWALK CULVERT FACILITY SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.

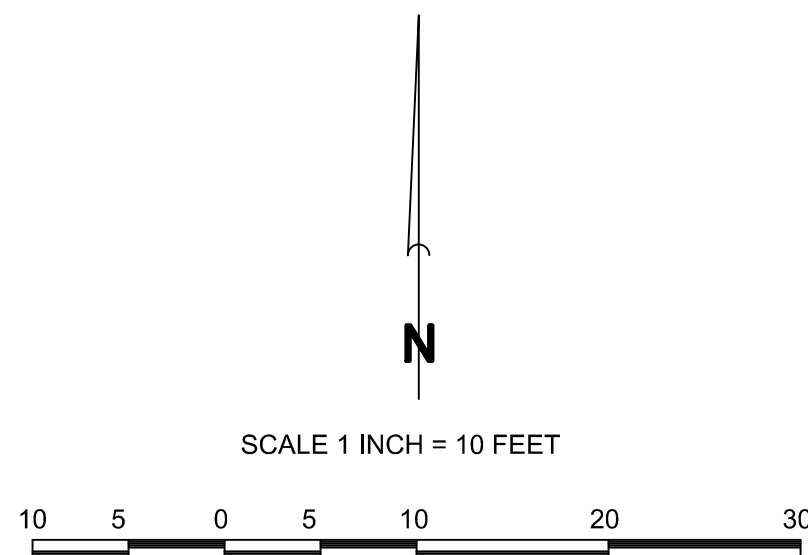
APPROVALS	NAME/S	DATE
A.C.E./DESIGN		
INSPECTOR		
A.C.E./FIELD		

CONDITION	B RETURN PERIOD	STORM TREATMENT TYPE	TREATMENT AREA	EXCESS PRECIPITATION	PEAK RUNOFF	RUNOFF VOLUME	RUNOFF RATE	
	N	(table 4)	sq. ft.	(table 8)	(table 9)	cu. ft.	cfs	
-	year	-	-	-	cfs/acre	-	-	
EXISTING	SITE	10	A	19097	0.13	0.38	207	0.17
			B	0	0.28	0.95	0	0.00
			C	0	0.52	1.71	0	0.00
			D	0	1.34	3.14	0	0.00
			TOTAL	19097			207	0.17
	100	A	19097	0.53	1.56	843	0.68	
		B	0	0.78	2.28	0	0.00	
		C	0	1.13	3.14	0	0.00	
		D	0	2.12	4.7	0	0.00	
			TOTAL	19097			843	0.68
DEVELOPED	SITE	10	A	0	0.13	0.38	0	0.00
			B	3883	0.28	0.95	91	0.08
			C	0	0.52	1.71	0	0.00
			D	15214	1.34	3.14	1699	1.00
			TOTAL	19097			1790	1.18
	100	A	0	0.53	1.56	0	0.00	
		B	3883	0.78	2.28	252	0.20	
		C	0	1.13	3.14	0	0.00	
		D	15214	2.12	4.7	2688	1.64	
			TOTAL	19097			2940	1.84
A	A	0	0.53	1.56	0	0.00		
	B	1655	0.78	2.28	108	0.09		
	C	0	1.13	3.14	0	0.00		
	D	16074	2.12	4.7	2840	1.73		
		TOTAL	17729			2947	1.82	

**ENTRY** (Broad Crested Weir)  
 $Q = CLH^{3/2}$ , where  $C = 1.82$  cfs,  $C = 2.8$ ,  $H = 0.45$  ft  
 Therefore  $L = 2.15$  ft  
 USE 27" CHANNEL AT ENTRY

**BARREL** (Mannings)  
 $Q = (1.49/n)AR^{2/3}S^{1/2}$ ,  $C = 1.82$  cfs,  $n = 0.013$ ,  $W = 1.0$  ft,  $S = 0.016$  ft/ft  
 Therefore flow depth =  $0.41$  ft and velocity =  $4.44$  fps  
 Note side wall thickness is the same width as the channel and slightly shorter. Therefore the velocity is higher and the depth is shallower.

**BARREL TAPER**  
 Taper = 20 Degree Maximum  
 $(2.25 - 1) \tan 20 = 3.43$  ft  
 Build 3'-6" Long Taper





## DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 12/2005)

PROJECT TITLE: REED APARTMENTS ZONE MAP: K17  
DRB#: --- EPC#: --- WORK ORDER#: ---

LEGAL DESCRIPTION: LOT 1-A, BLOCK 11, VALLEY VIEW ADDITION  
CITY ADDRESS: 321 JEFFERSON ST. SE

ENGINEERING FIRM: Bordenave Designs CONTACT: J. Bordenave  
ADDRESS: PO Box 91194 PHONE: 823-1344  
CITY, STATE: Albuquerque, NM ZIP CODE: 87109

OWNER: F. Reed CONTACT: F. Reed  
ADDRESS: 2236 Durand Rd. SW. PHONE: 922-9170  
CITY, STATE: Denver, CO ZIP CODE: 87105

ARCHITECT: J. Burwinkle CONTACT: J. Burwinkle  
ADDRESS: 3700 Coors Blvd. NW, Suite E- PHONE: 345-3850  
CITY, STATE: Albuquerque, NM ZIP CODE: 87120

SURVEYOR: Construction Survey Technologies, Inc. CONTACT: D. Vigil  
ADDRESS: 5030 Faifax Dr. NW PHONE: 917-8921  
CITY, STATE: Albuquerque, NM ZIP CODE: 87114

CONTRACTOR: Unknown CONTACT: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_  
CITY, STATE: \_\_\_\_\_ ZIP CODE: \_\_\_\_\_

### TYPE OF SUBMITTAL:

\_\_\_\_ DRAINAGE REPORT  
\_\_\_\_ DRAINAGE PLAN 1<sup>ST</sup> 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  
\_\_\_\_ GRADING PERMIT APPROVAL  
\_\_\_\_ PAVING PERMIT APPROVAL  
\_\_\_\_ WORK ORDER APPROVAL  
\_\_\_\_ OTHER (SPECIFY) \_\_\_\_\_

### WAS A PRE-DESIGN CONFERENCE ATTENDED:

\_\_\_\_ YES  
☒ NO  
\_\_\_\_ COPY PROVIDED

DATE SUBMITTED: February 21, 2015 BY: Jake Bordenave

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.

# CITY OF ALBUQUERQUE



March 12, 2015

Jake Bordenave, P.E.  
Bordenave Designs  
PO Box 91194  
Albuquerque, New Mexico 87109

RE: **Reed Apartments**  
**Jefferson NE**  
**Request Permanent C.O. – Not Accepted**  
**Engineers Stamp Date 9/22/14 (K17D105)**  
**Certification Dated (No Date)**

Dear Mr. Bordenave,

Based upon the information provided in your certification received 2/24/2015, the permanent CO cannot be approved until the following comments are addressed.

- Provide a date with your signature.
- The sidewalk culvert must meet city regulations and be approved by Jason Rodriguez with DMD.

Once the sidewalk culvert has been accepted by Jason Rodriguez an onsite visit will be conducted for final CO.

If you have any questions you can contact me at 924-3986 or Rudy Rael at 924-3977.

Sincerely,

Curtis Cherne, P.E.  
Principal Engineer  
Planning Department

RR/CC  
C: File