

Check for ADA
Show existing features like walls, PP along the alley
To be constructed under the work order.

Provide spot elevations @ the back of the sidewalk
Driveways not used shall be removed & replaced w/ sidewalk

What are the grades beyond this point?

any off-site flow
How is the existing site draining to the street?
Provide spot elevations

check for MA

* Dependent Landscaping Areas 16' Min.

To be constructed w/ the work order

EXISTING DRAINAGE

THE SITE IS CURRENTLY VACANT AND IS LOCATED AT THE NORTHEAST CORNER OF 14TH STREET AND COAL AVENUE. THE SITE IS BOUNDED ON THE SOUTH BY COAL AVENUE, ON THE WEST BY 14TH STREET, ON THE NORTH BY AN ALLEY AND ON THE EAST BY APARTMENTS. THE SITE WAS DEVELOPED AT ONE TIME WITH A PARKING LOT THAT HAS SINCE BEEN REMOVED. ACCORDING TO A DRAINAGE REPORT COMPLETED BY COMMUNITY SCIENCES AND APPROVED ON MAY 15, 2007 THIS SITE HAS A HISTORIC DISCHARGE RATE OF 1.37 CFS. THAT STORM WATER SURFACED DRAINED TO THE STREETS AND INTO A DROP INLET LOCATED AT THE CORNER.

PROPOSED DRAINAGE

THE SITE IS DIVIDED INTO 2 BASINS. BASIN 1 DRAINS TO COAL AVENUE AND THE ALLEY, BASIN 2 DRAINS TO 14TH STREET. THE STORM WATER FOLLOWS THE SAME PATH AS IT DOES HISTORICALLY AND FLOWS INTO THE DROP INLET AT THE CORNER. THE TOTAL FLOW DISCHARGED FROM THE SITE IS 1.37 CFS. EACH UNIT WILL HAVE A RAIN BARREL AS SHOWN ON THE PLAN AND WILL CAPTURE ABOUT 50 GALLONS OF STORM WATER TO BE USED FOR IRRIGATION. THE DEVELOPED FLOWS WERE CALCULATED USING THE WEIGHTED "E" METHOD AND ARE SHOWN IN THE TABLE BELOW.

The 14 East Weighted E Method

On-Site Basins											100-Year			10-Year		
Basin	Area (sf)	Area (acres)	Treatment A		Treatment B		Treatment C		Treatment D		Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs
			%	(acres)	%	(acres)	%	(acres)	%	(acres)						
1	7,632	0.18	0%	0	25%	0.04	0%	0.00	75%	0.13	1.785	0.026	0.72	1.075	0.016	0.45
2	6,568	0.15	0%	0	15%	0.02	0%	0.00	85%	0.13	1.919	0.024	0.65	1.181	0.015	0.42

Equations:

Weighted E = $E_a \cdot A_a + E_b \cdot A_b + E_c \cdot A_c + E_d \cdot A_d$ / (Total Area)

Volume = Weighted D * Total Area

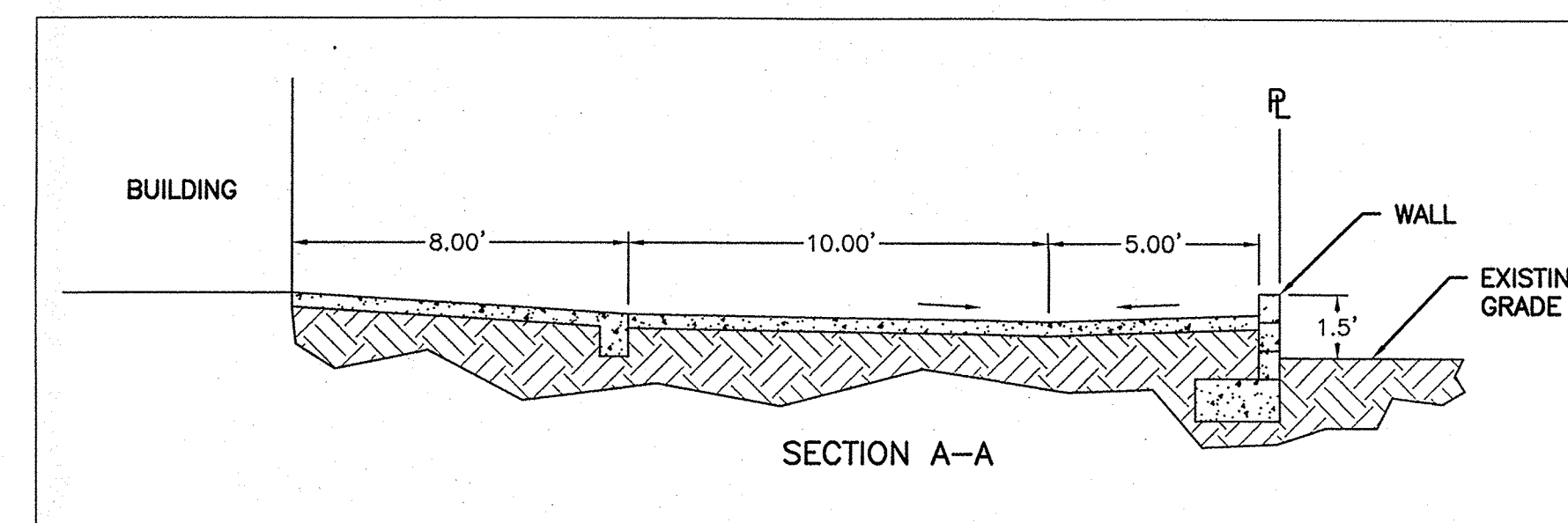
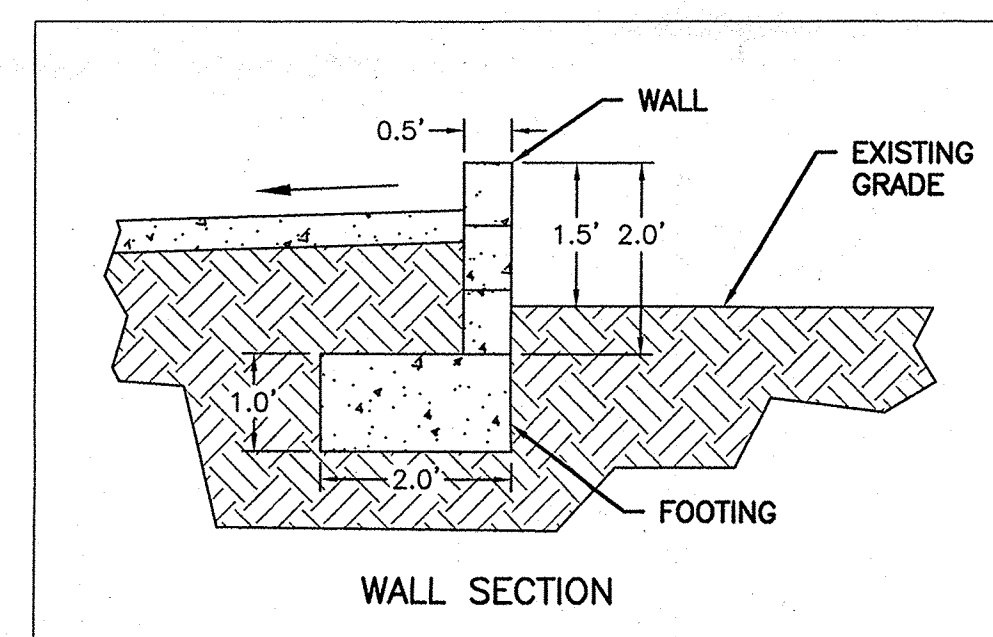
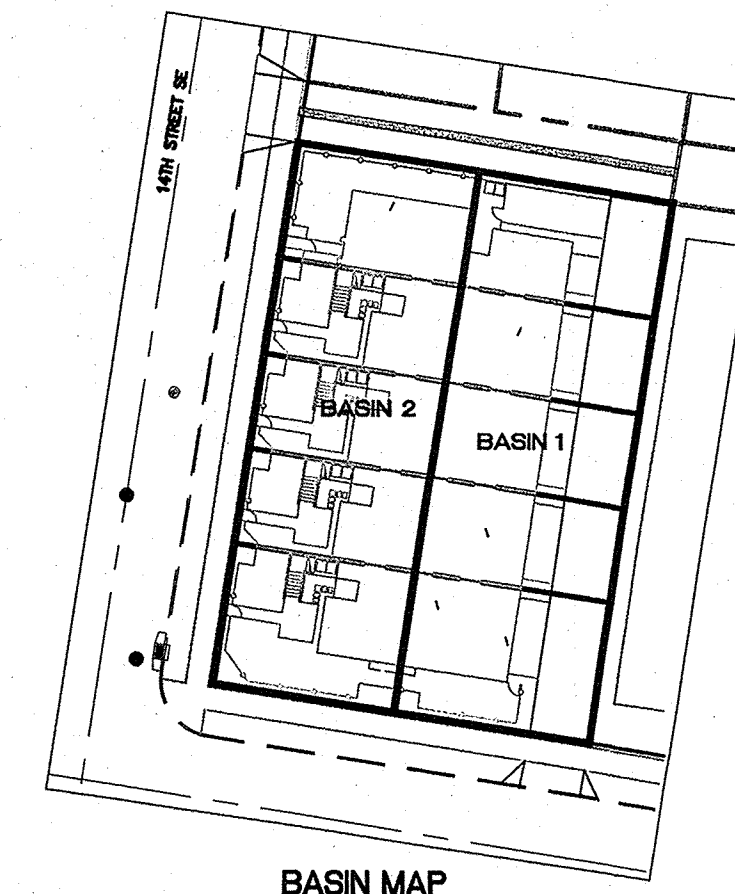
Flow = $Q_a \cdot A_a + Q_b \cdot A_b + Q_c \cdot A_c + Q_d \cdot A_d$

Excess Precipitation, E (inches)		
Zone 2	100-Year	10-Year
E_a	0.53	0.13
E_b	0.78	0.28
E_c	1.13	0.52
E_d	2.12	1.34

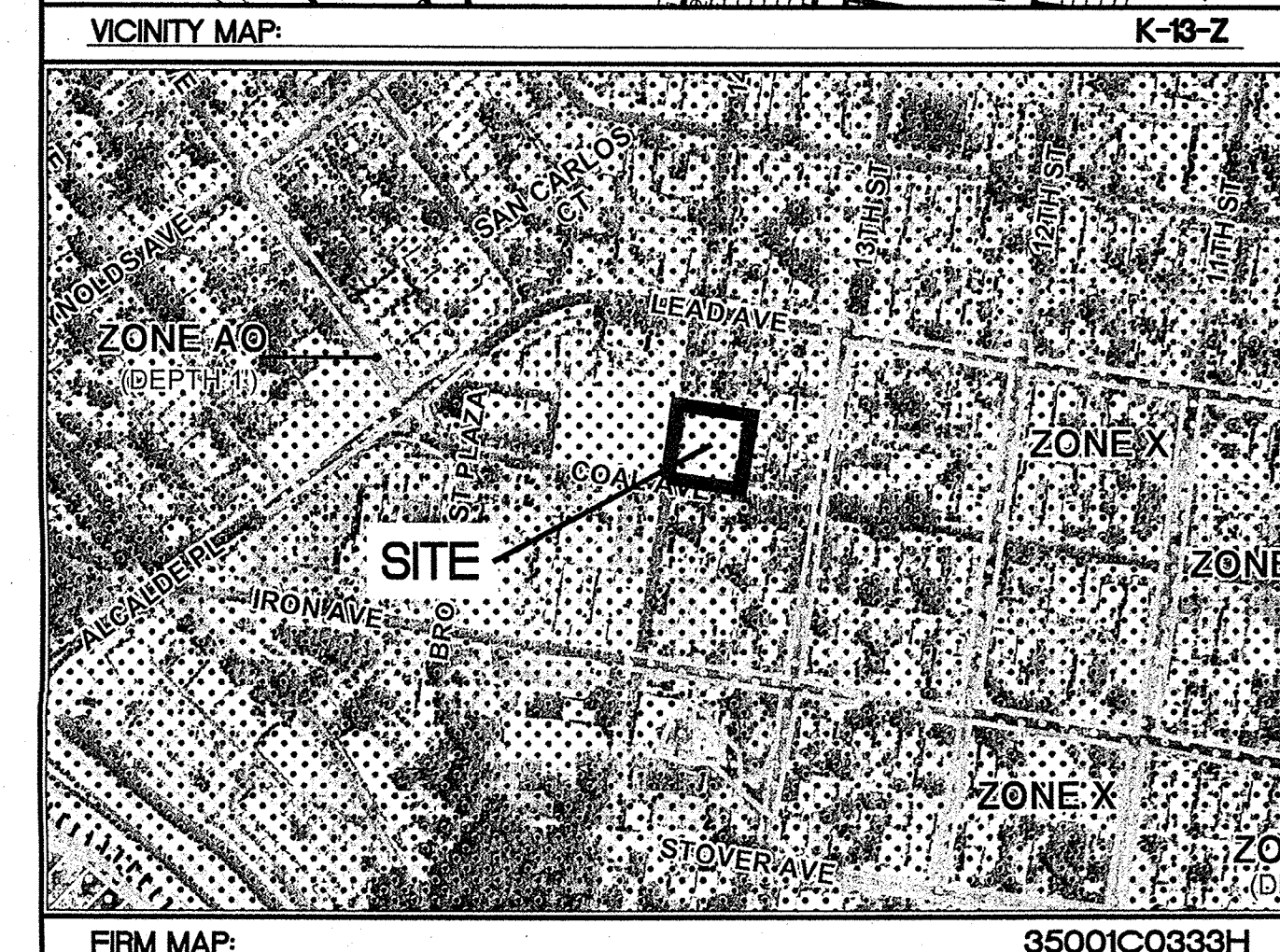
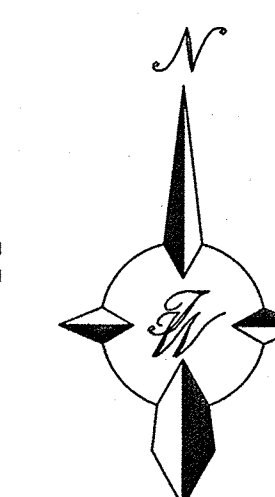
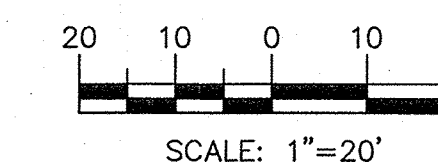
Peak Discharge (cfs/acre)		
Zone 2	100-Year	10-Year
Q_a	1.56	0.38
Q_b	2.28	0.95
Q_c	3.14	1.71
Q_d	4.70	3.14

LEGEND

- BOUNDARY LINE
- EASEMENT
- CENTERLINE
- RIGHT-OF-WAY
- RETAINING WALL
- SPOT ELEVATION
- FLOW ARROW
- RAIN BARREL (50 GALLON MIN.)
- EXISTING SIDEWALK
- EXISTING CURB & GUTTER
- EXISTING BOUNDARY LINE
- EXISTING CONTOUR MAJOR
- EXISTING CONTOUR MINOR
- EXISTING ELEVATION



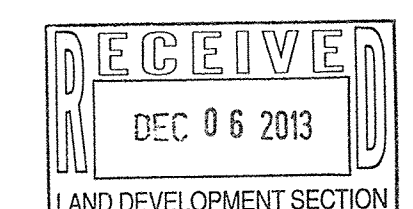
GRAPHIC SCALE



NOTICE TO CONTRACTORS

- AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1985.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONNECTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
- MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
- WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

City BM



ENGINEER'S SEAL	<div>THE 14TH EAST 14TH AND COAL</div> <div>GRADING AND DRAINAGE PLAN</div> <div><div>TIERRA WEST, LLC</div><div>5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NM 87109 (505) 858-3100 www.tierrawestllc.com</div></div>	DRAWN BY BJF
		DATE 11/20/13
		2013044_GRE
		SHEET # C1
RONALD R. BOHANNAN P.E. #7868		JOB # 2013044