

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.

2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.

3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.

4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.

5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.

Weighted E Method

Basin	Area sq ft	Area (acres)	Treatment					100-Year 6-hr			10-day Volume (cfs)		
			Treatment A %	Treatment B %	Treatment C %	Treatment D %	Weighted E (cfs)	Volume (cfs)	Flow cfs				
BASIN A1	19302	4.431	0%	0%	12.532	50.0%	21.1559	38%	1.653	1610	17.48	0.8	
ALLOWED IN (AMDP)	42336	9.431	0%	34.0%	1.507	16.0%	0.7099	50%	2.169	1898	0.627	17.48	0.9
LID AND	42336	9.431	0%	34.0%	3.304	16.0%	1.5549	50%	2.899	1999	1.378	28.35	2.0

Equations:

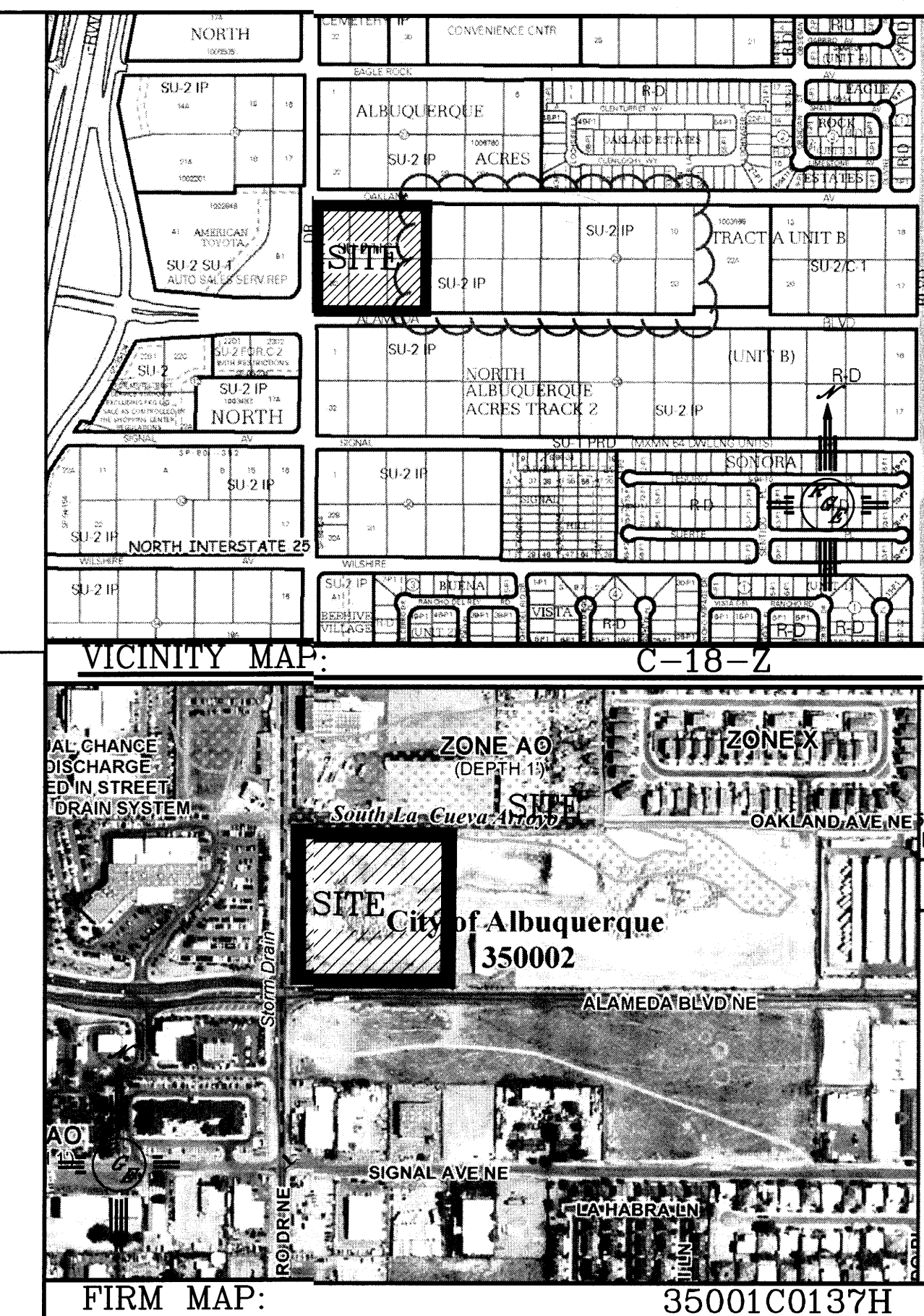
$$\text{Weighted E} = E_a \cdot A_a + E_b \cdot A_b + E_c \cdot A_c + E_d \cdot A_d / (\text{Total Area})$$

$$\text{Volume} = \text{Weighted } D \cdot \text{Total Area}$$

$$Flow = Qa \cdot Aa + Qb \cdot Ab + Qc \cdot Ac + Qd \cdot Ad$$

Where for 100-year, 6-hour storm (zone 3)

DRAINAGE NARRATIVE
Site is a temporary use. The site is located bays 117.2 and 117.3. The upland flow of 38.35 cfs will enter the site and drain to the swale along oakland. The flow will be captured by a double D inlet. The on-site flow will be captured by a single D inlet connected to the wye stubbed into the property. The land treatment of millings was approximated by assigning 50% and 50% C. The first flush volume of 2078 has been provided onsite

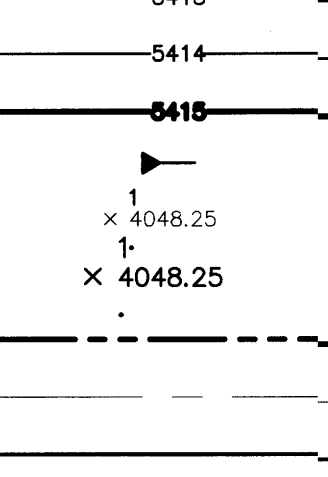


LEGAL DESCRIPTION:

NOTES:

- NOTES:**
1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
 2. ALL CURB AND GUTTER TO 6" HEADER UNLESS OTHERWISE NOTED.
 3. ALL RETAINING WALL DESIGN SHALL BE BY OTHERS.

LEGEND



- 5414--- EXISTING CONTOUR
- 5415--- EXISTING INDEX CONTOUR
- 5414— PROPOSED CONTOUR
- 5415— PROPOSED INDEX CONTOUR
- ▲ SLOPE TIE
- × 4048.25 EXISTING SPOT ELEVATION
- † × 4048.25 PROPOSED SPOT ELEVATION
- BOUNDARY
- - - CENTERLINE
- RIGHT-OF-WAY
- PROPOSED CURB AND GUTTER
- EXISTING CURB AND GUTTER
- PROPOSED SIDEWALK
- - - PROPOSED SETBACK
- - - PROPOSED LOT LINE
- PROPOSED SCREEN WALL
- ===== PROPOSED RETAINING WALL
- LIMITS OF FLOODPLAIN

ROUGH GRADING APPROVAL

DATE _____



1/9/19

DAVID SOULE
P.F. #14522

AMERICAN TOYOTA
TEMPORARY LOT

CONCEPTUAL GRADING AND DRAINAGE PLAN



*Rio Grande
Engineering*
1806 CENTRAL AVENUE SE
SUITE 201
ALBUQUERQUE, NM 87106
(505) 872-0999

DRAWN
BY WCWJ
DATE
1-09-15

21403-LAYOUT-1-25-14

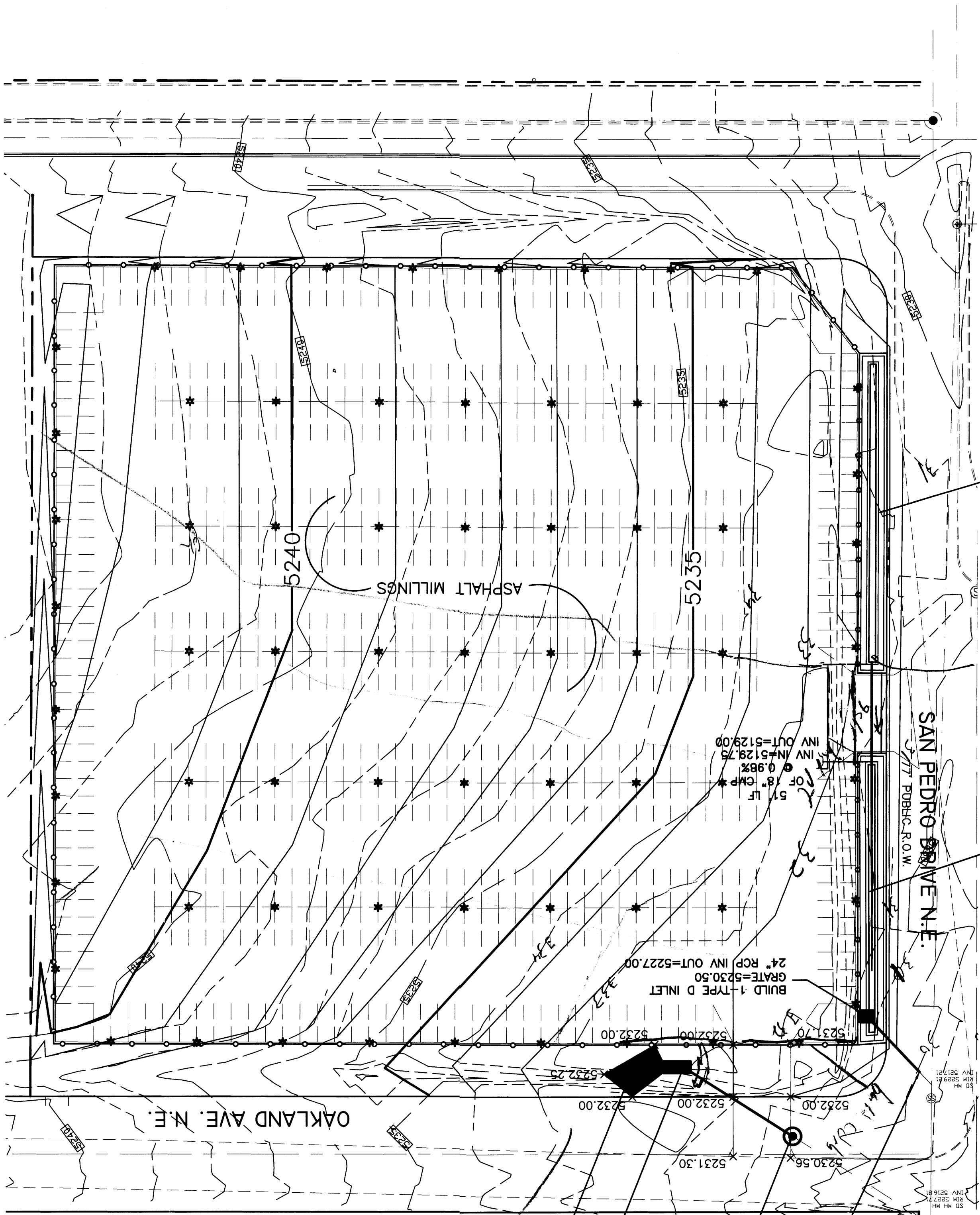
SHEET #

2 of 2

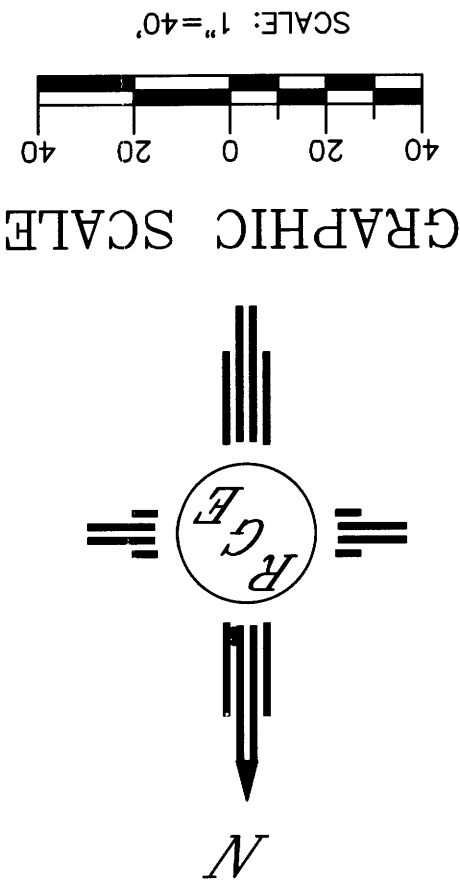
JOB #
21403

CAUTION:
EXISTING UTILITIES ARE NOT SHOWN.
IT SHALL BE THE SOLE RESPONSIBILITY
OF THE CONTRACTOR TO CONDUCT ALL
NECESSARY FIELD INVESTIGATIONS PRIOR
TO ANY EXCAVATION TO DETERMINE THE
ACTUAL LOCATION OF UTILITIES & OTHER
IMPROVEMENTS.

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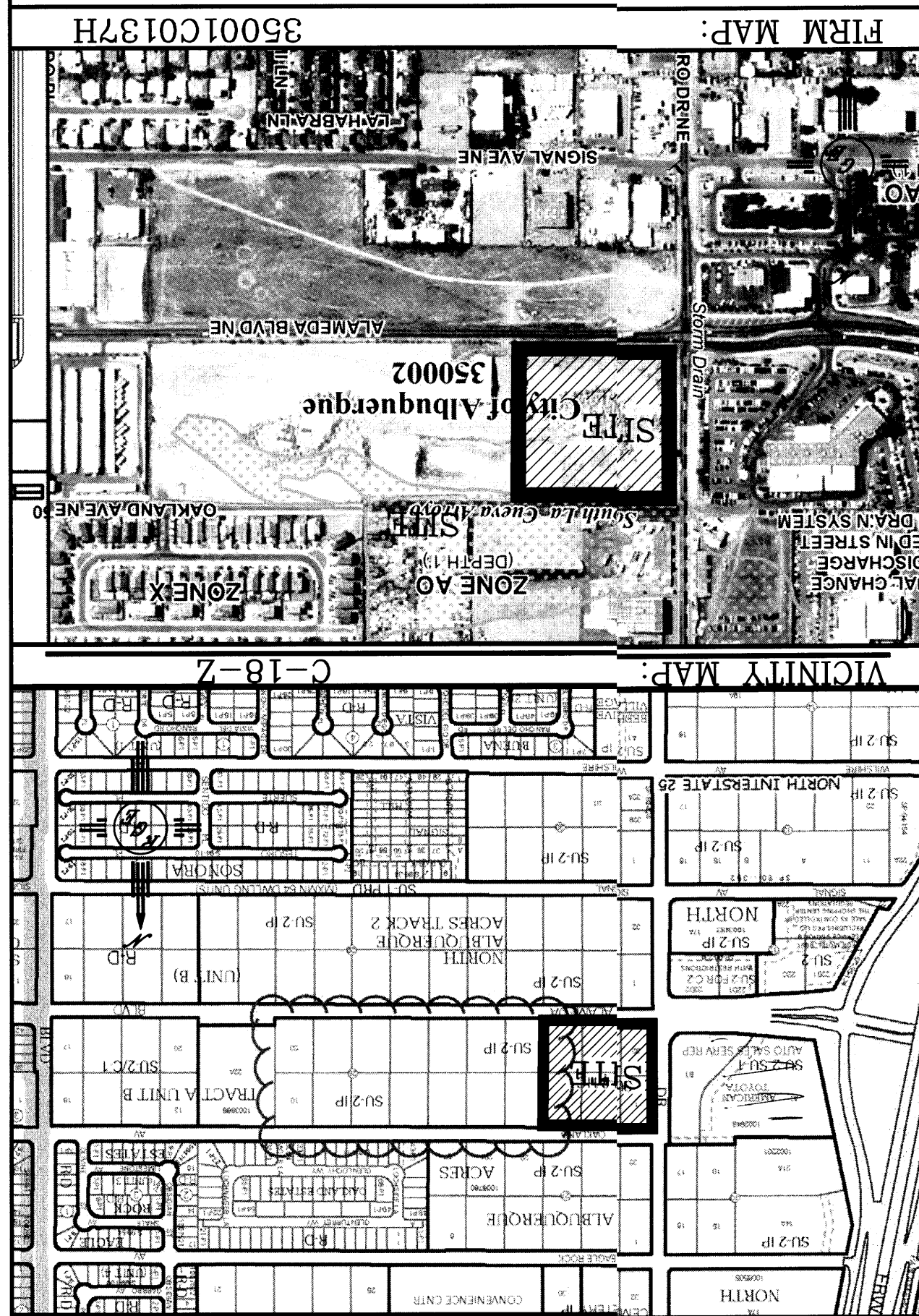
Handwritten calculation: $1.910 \times 47.856 \div 12 = 7.34''$
 $7.34'' \times 12 = 88.28'$

ENGINEER'S SEAL	AMERICAN TOYOTA	DATE	2-25-15	SHEET #	21403
DAVID SOULE	GRADING AND DRAINAGE PLAN	BY	WCM		
2/24/15	Temporary Construction				
P.E. #14522	DAVID SOULE				
ALBUQUERQUE, NM 87106	1806 CENTRAL AVENUE SE				
(505) 872-0999	SUITE 201				
	ALBUQUERQUE, NM 87106				

LEGEND	
EXISTING CONTOUR	-5414-
EXISTING INDEX CONTOUR	-5419-
PROPOSED CONTOUR	-5414-
PROPOSED INDEX CONTOUR	-5419-
SLOPE TIE	1
EXISTING SPOT ELEVATION	X 4048.25
PROPOSED SPOT ELEVATION	X 4048.25
BOUNDARY	---
CENTERLINE	---
RIGHT-OF-WAY	---
PROPOSED CURB AND GUTTER	---
EXISTING CURB AND GUTTER	---
PROPOSED SIDEWALK	---
PROPOSED SETBACK	---
PROPOSED LOT LINE	---
PROPOSED SCREEN WALL	---
PROPOSED RETAINING WALL	---
LIMITS OF FLOODPLAIN	---
ASPHALT APRON	---

- NOTES:
1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
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Weighted E Method
AMERICAN TOYOTA TEMPORARY YARD

							100-Year 6-hr		10-day					
Basin	Area (sf)	Area (acres)	Treatment A % (acres)	Treatment B % (acres)	Treatment C % (acres)	Treatment D % (acres)	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Volume (ac-ft)				
BASIN AT UPLAND IN WAAMP ALLOWED	180022	4.431	0%	0	12.0%	0.532	50.0%	2.21559	33%	1.884	1.852	0.810	17.48	0.835
	180022	4.431	0%	0	34.0%	1.507	16.0%	0.70889	50%	2.216	1.899	0.827	17.48	0.823
	423336	9.718	0%	0	34.0%	3.304	16.0%	1.55495	50%	4.859	1.989	1.376	38.35	2.024

Equations:

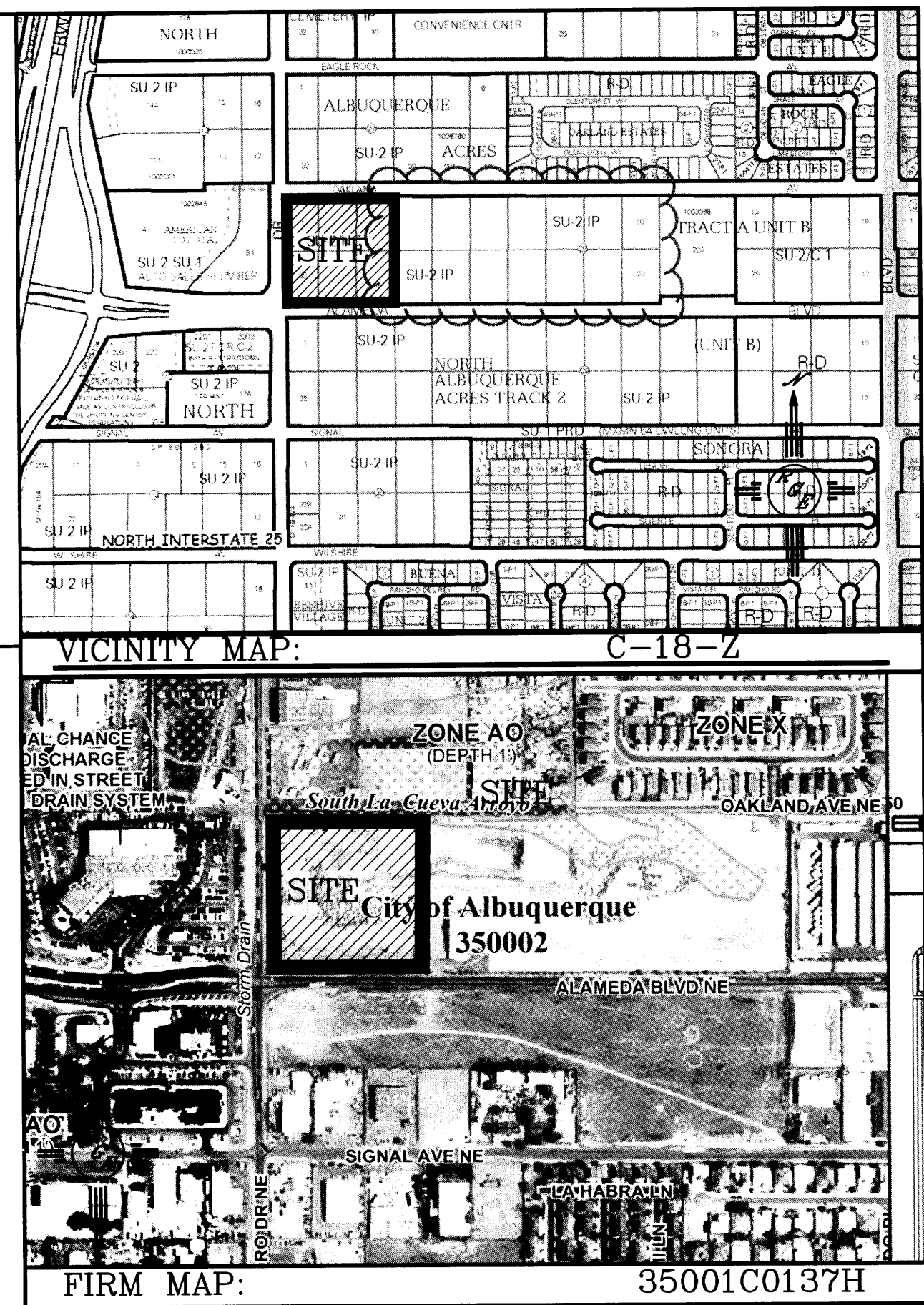
Weighted E = $E_a A_a + E_b A_b + E_c A_c + E_d A_d$ (Total Area)

Volume = Weighted D * Total Area

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

Where for 100-year, 6-hour storm (zone 3):
 $E_a = 0.66$ $Q_a = 1.87$
 $E_b = 0.92$ $Q_b = 2.6$
 $E_c = 1.29$ $Q_c = 3.45$
 $E_d = 2.38$ $Q_d = 5.02$
FIRST FLUSH = 1781.317 CF

DRAINAGE NARRATIVE
Site is a temporary use. The site is located basins 117.2 and 117.3. The upland flow of 38.35 cfs will enter the site and drain to the swale along oakland. The flow will be captured by a double D in the on-site flow will be captured by a single D inlet connected to the wye stubbed into the property. The land treatment of millings was approximated by assigning 50% and 50%
The first flush volume of 2078 has been provided onsite



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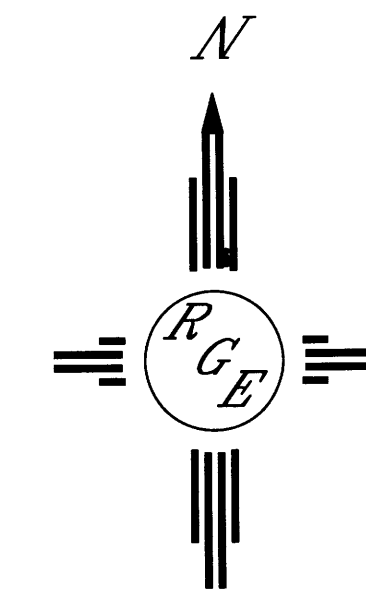
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4. ALL STORM DRAIN AND INLETS SHALL BE CONSTRUCTED UNDER THE CITY OF ALBUQUERQUE PUBLIC WORK ORDER PROCESS.

LEGEND

- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- PROPOSED CONTOUR
- PROPOSED INDEX CONTOUR
- SLOPE TIE
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- BOUNDARY
- CENTERLINE
- RIGHT-OF-WAY
- PROPOSED CURB AND GUTTER
- EXISTING CURB AND GUTTER
- PROPOSED SIDEWALK
- PROPOSED SETBACK
- PROPOSED LOT LINE
- PROPOSED SCREEN WALL
- PROPOSED RETAINING WALL

- LIMITS OF FLOODPLAIN
- 1" THICK ASPHALT APRON



GRAPHIC SCALE

SCALE: 1"=40'

CAUTION:

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ENGINEER'S SEAL DAVID SOULE NEW MEXICO REGISTERED PROFESSIONAL ENGINEER 4/13/15 DAVID SOULE P.E. #14522	AMERICAN TOYOTA TEMPORARY CONSTRUCTION YARD GRADING AND DRAINAGE PLAN Rio Grande Engineering 1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0899	DRAWN BY WCWJ DATE 2-25-15 21403-LAYOUT-1-25-14 SHEET # JOB # 21403
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Weighted E Method
AMERICAN TOYOTA TEMPORARY YARD

Basin	Area (sq ft)	Area (acres)	Treatment A		Treatment B		Treatment C		Treatment D		100-Year, 6-hr		10-day	
			(%)	(acres)	(%)	(acres)	(%)	(acres)	(%)	(acres)	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Volume (ac-ft)
BASIN A1	183022	4.231	0%	0	12.0%	0.532	50.0%	2.15559	33%	1.684	1.652	0.610	17.48	0.835
ALLOWED IN NAAMPD UPLAND	193022	4.431	0%	0	34.0%	1.507	16.0%	0.70899	50%	2.216	1.899	0.627	17.49	0.923
	423336	9.718	0%	0	34.0%	3.304	16.0%	1.55495	50%	4.859	1.899	1.376	38.35	2.024

Equations:
Weighted E = Ea*As + Eb*Ab + Ec*Ac + Ed*Ad / (Total Area)

Volume = Weighted D * Total Area

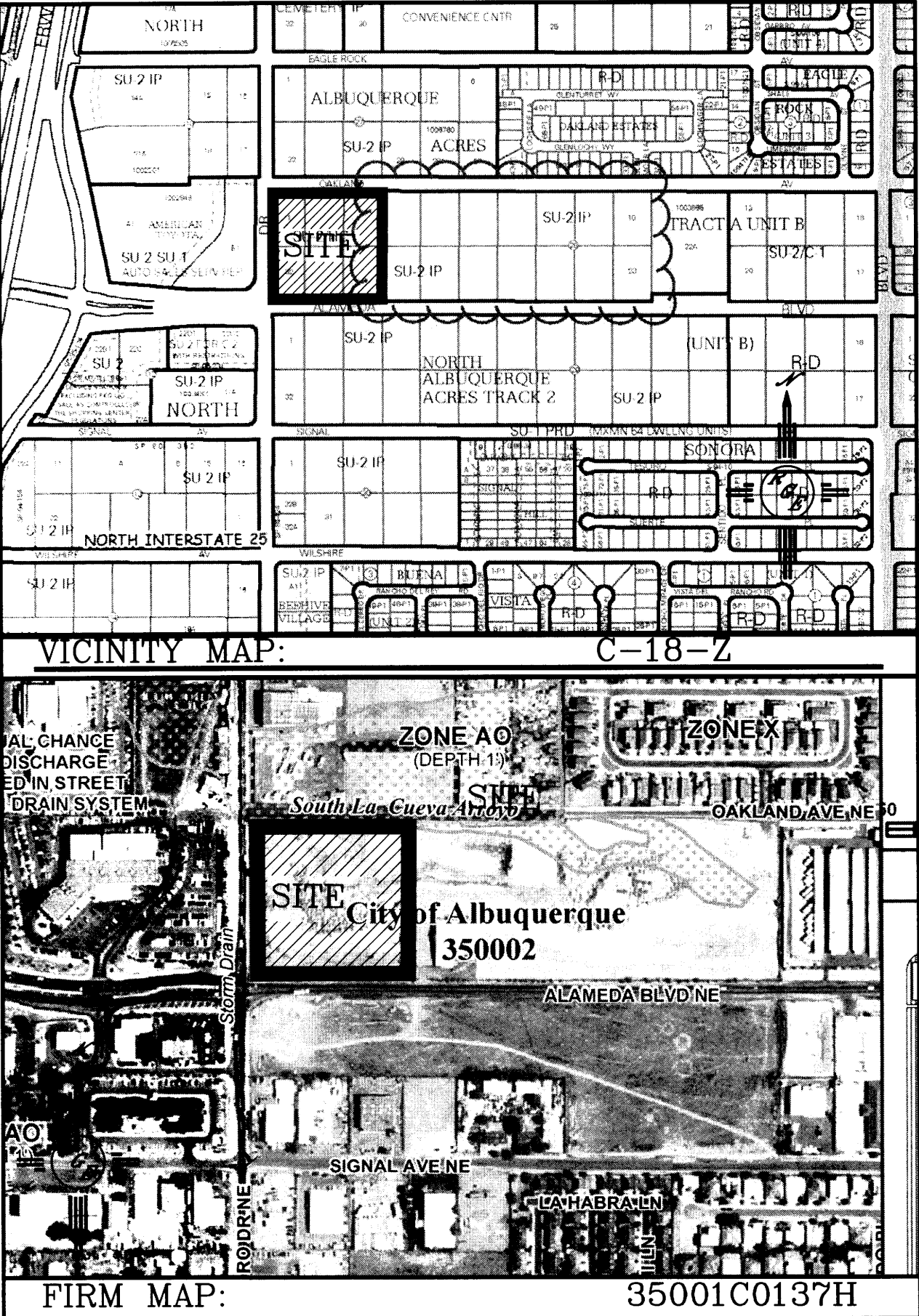
Flow = Qa * As + Qb * Ab + Qc * Ac + Qd * Ad

Where for 100-year, 6-hour storm (zone 3):
Ea= 0.66
Eb= 0.92
Ec= 1.29
Ed= 2.38

Qa= 1.87
Qb= 2.9
Qc= 3.45
Qd= 5.02

FIRST FLUSH= 1781.317 CF

DRAINAGE NARRATIVE
Site is a temporary use. The site is located along 117.2 and 117.3. The upland flow of 38.35 cfs will enter the site and drain to the swale along Oakland Ave. The flow will be captured by a double D in the on-site flow will be captured by a single D inlet connected to the swale sloped into the property. The land treatment of millings was approximated by assigning 50% and 50%.
The first flush volume of 2078 has been provided on-site



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- SLOPE TIE ---
- x 4048.25 EXISTING SPOT ELEVATION
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- BOUNDARY ---
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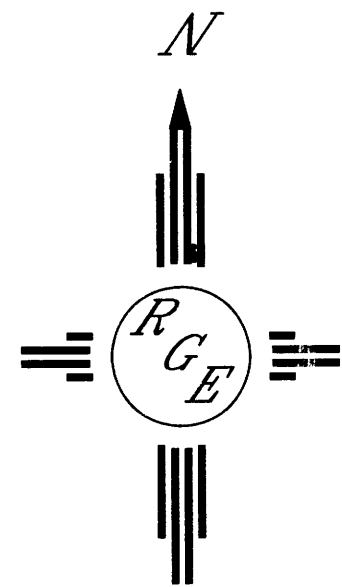
- LIMITS OF FLOODPLAIN ---
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I David Soule, NMPE 14522, of the firm Rio Grande Engineering, hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intend of the approved plan dated 5/16/13. The record information edited on the original design document has performed by me or under my direct supervision and is true and correct to the best of my knowledge and belief. The as-built survey was provided by GARY GRITSKO NMPLS 8686. The certification is submitted in support of a request for RELEASE OF BUILDING PERMIT FOR AMERICAN TOYOTA. The record information presented heron is not necessarily complete and 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.

WITH THE FOLLOWING EXCEPTIONS

1. RIP RAP AND APRONS AT PONDS WILL BE CONSTRUCTED WITH INLETS TO ALLOW FOR SMOOTH TRANSITION.
2. INLETS CAN NOT BE CONSTRUCTED UNTIL WORK ORDER IS APPROVED
3. ASPHALT CURB NOT CONSTRUCTED UNTIL INLETS THAT COLLECT THE WATER ARE CONSTRUCTED. THE CONCENTRATION OF FLOW AND CHANGE OF DIRECTION NOT RECOMMENDED UNTIL COLLECTION INLET IS BUILT.



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