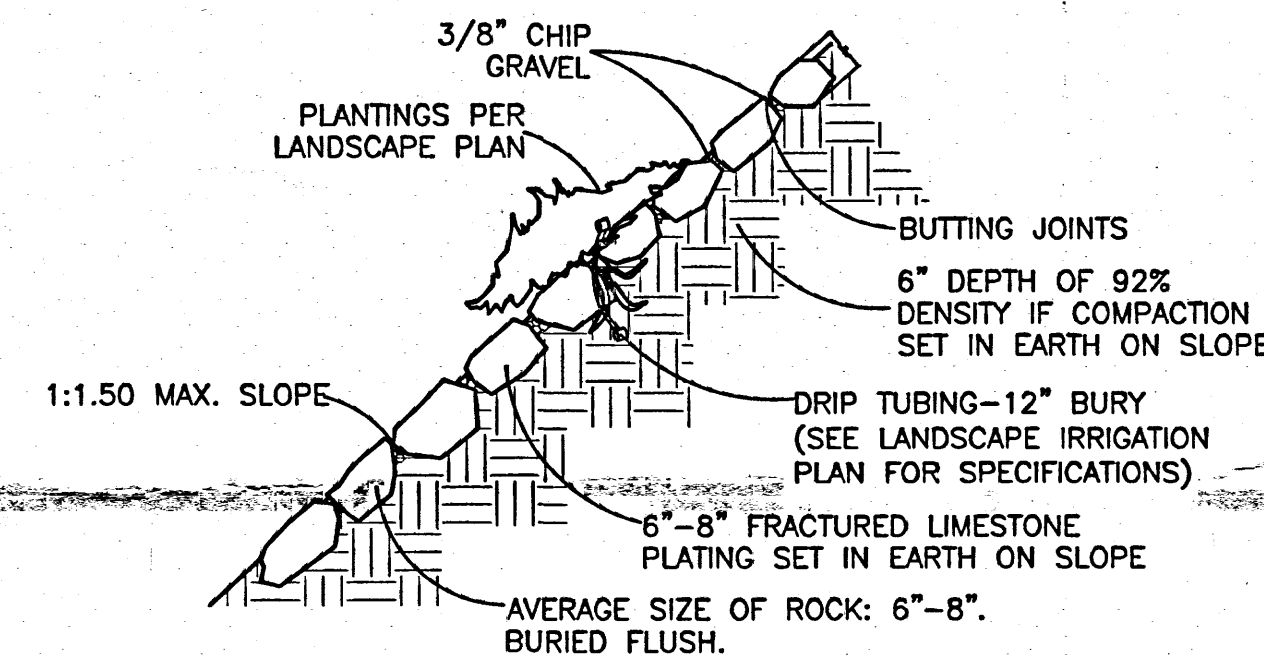


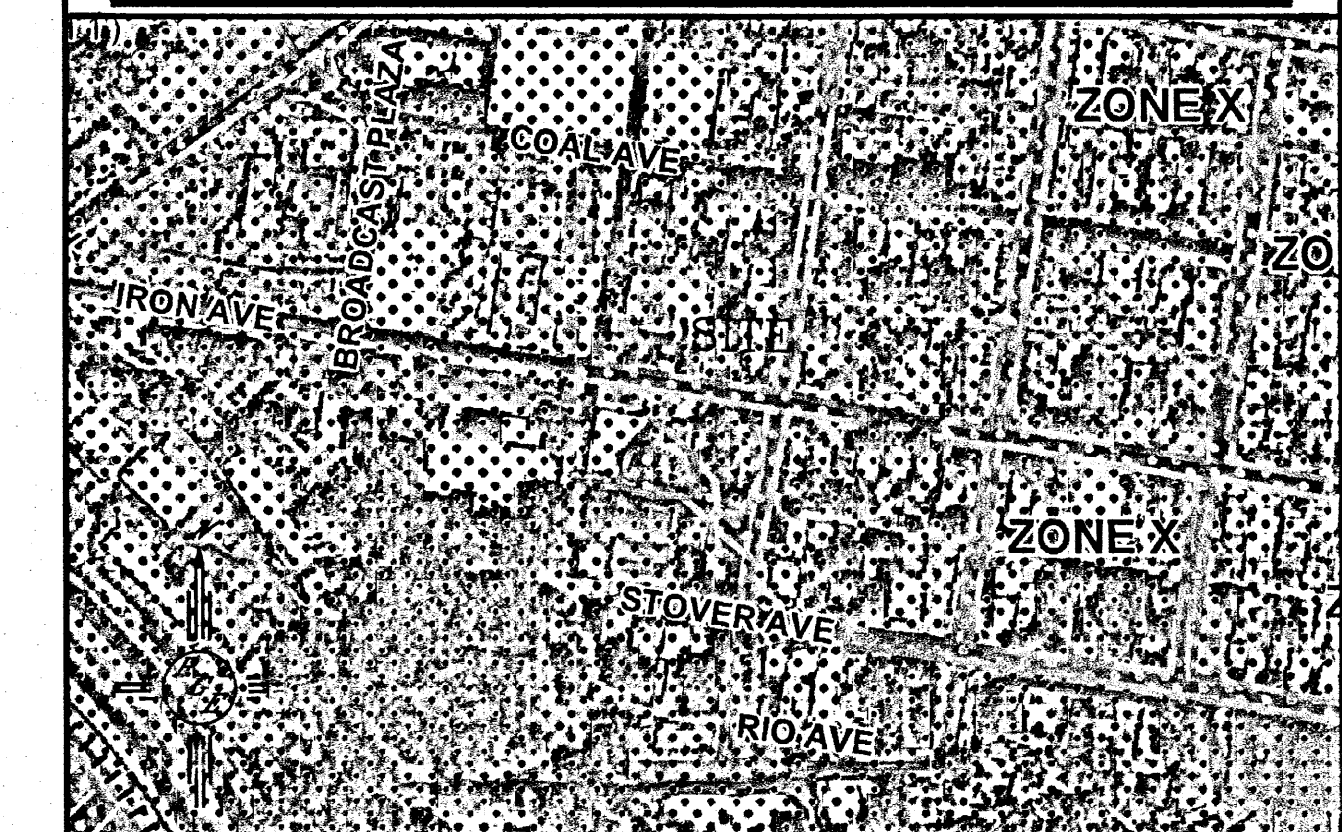
EXISTING UTILITIES ARE NOT SHOWN.
IT SHALL BE THE SOLE RESPONSIBILITY
OF THE CONTRACTOR TO CONDUCT ALL
NECESSARY FIELD INVESTIGATIONS PRIOR
TO ANY EXCAVATION TO DETERMINE THE
ACTUAL LOCATION OF UTILITIES & OTHER



NT

RETAIN ALL ALLEY FLOW 530 CF

VICINITY MAP



FIRM MAP.

FM35001C0333H

LEGAL DESCRIPTION:

LOTS 15 AND 16 BLOCK 43 RAYNOLDS ADDITION

NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.

2. ALL CURBS TO BE 6" HEADER

EROSION CONTROL NOTES:

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.

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 SCREW WALL
		PROPOSED RETAINING WALL
		DESIGN BY OTHERS

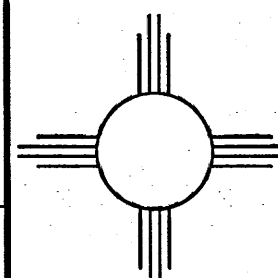
ENGINEER'S
SEAL

11/4/16

DAVID SOULE
P.E. #14522

1203 IRON
DUPLEX

GRADING AND DRAINAGE PLAN



*Rio Grande
Engineering*

1606 CENTRAL AVENUE
SUITE 201
ALBUQUERQUE, NM 87106

DRAWN
BY WCW.I

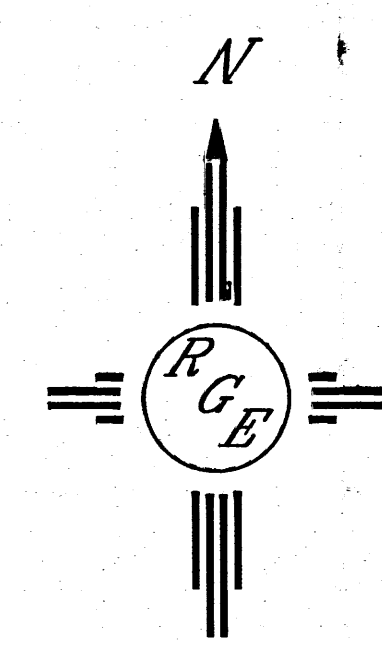
DATE
11-02-16

21637-LAYOUT-11-02-1

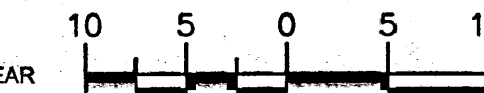
SHEET #

100

JOB #
21637

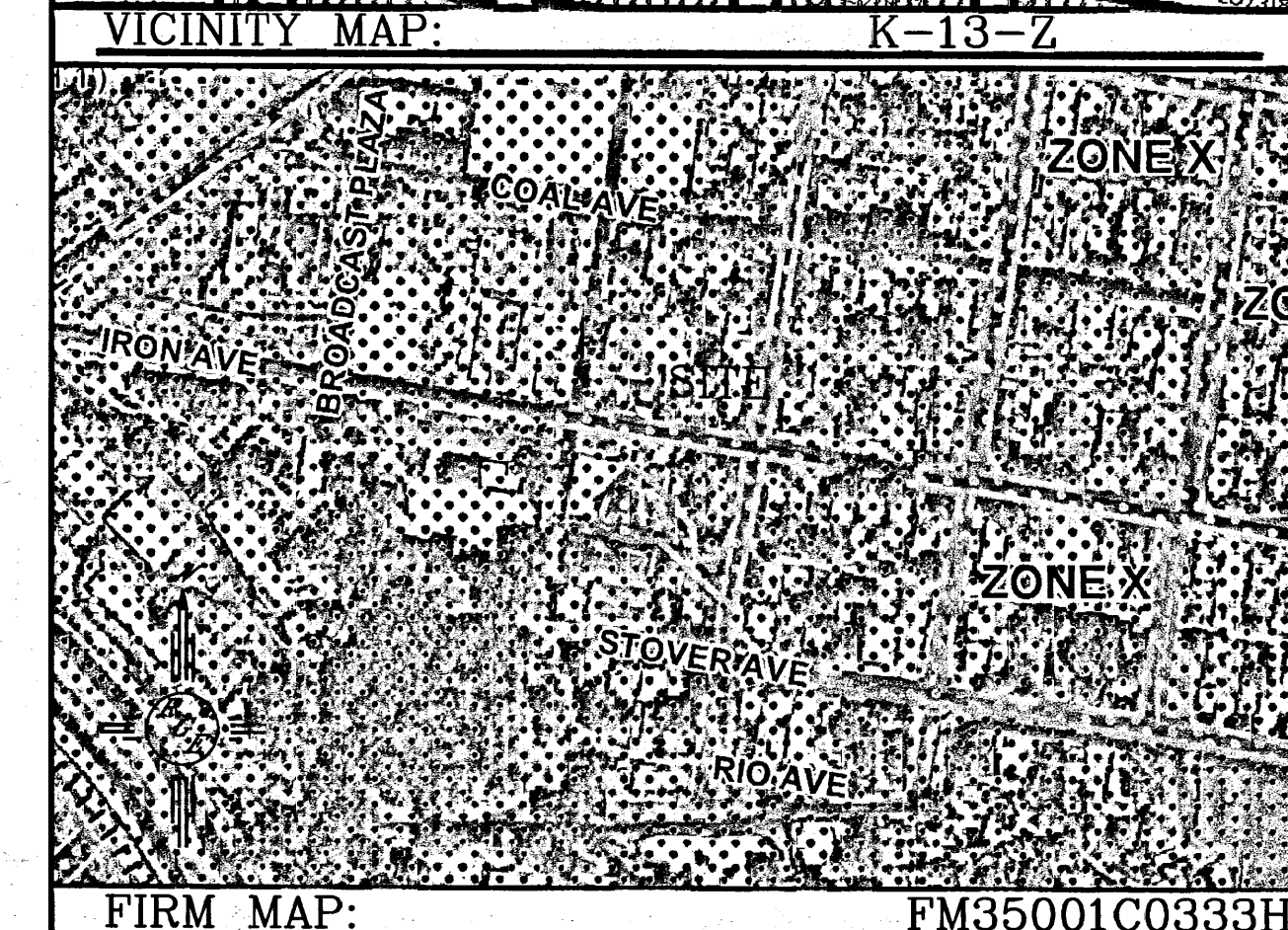


GRAPHIC SCALE



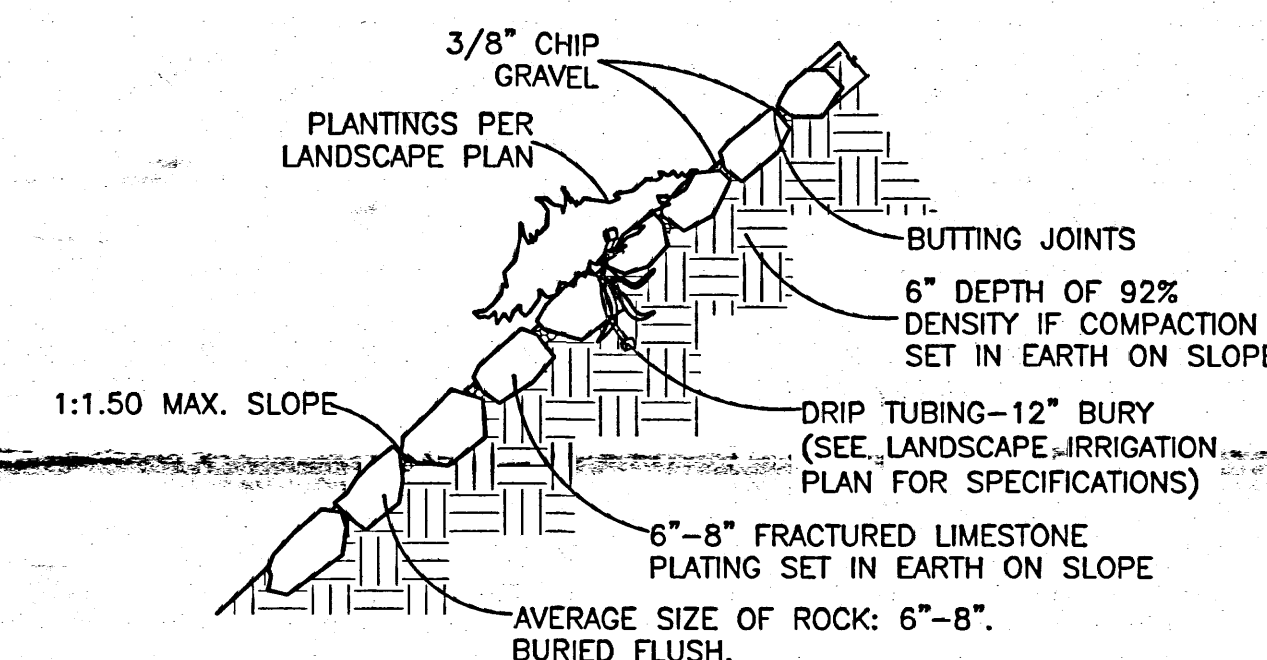
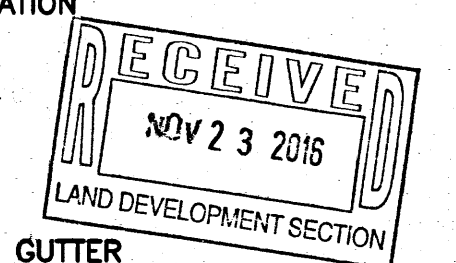
SCALE: 1"=10'

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.



LOTS 2-D AND 2-E, BLOCK 2-A, CHELWOOD PARK

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. ALL CURBS TO BE 6" HEADER.
3. THE CONTRACTOR WILL BE REQUIRED TO SAWCUT AND REPAIR THOSE PORTIONS OF THE CONCRETE ALLEY THAT ARE DEGRADED BY THE CONSTRUCTION OF THE IMPROVEMENTS.
4. DOWN SPOOTS SHOWN SHALL CONNECT TO A 4" WIDE SIDEWALK TRENCH DRAIN TO ALLOW ROOF DRAINAGE TO DRAIN UNDER SIDEWALKS.

[illegible]

NTS

Weighted E Method

Existing Developed Basins														
Basin	Area (ft ²)	Area (acres)	Treatment A	Treatment B	Treatment C	Treatment D	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	24-HOUR				
			%	(acres)	(acres)	(acres)				(acres)	Volume (ac-ft)			
EXISTING	7100	0.163	0%	0	100.0%	0.163	0.0%	0	0%	0.000	0.780	0.011	0.37	0.01
PROPOSED	7100	0.163	0%	0	13.0%	0.021	15.0%	0.02445	72%	0.117	1.797	0.024	0.68	0.22
TO IRON	3050	0.070	0%	0	13.0%	0.009	15.0%	0.0105	72%	0.050	1.797	0.010	0.29	0.01
TO ALLEY	4050	0.093	0%	0	13.0%	0.012	15.0%	0.01395	72%	0.067	1.797	0.014	0.39	0.01

Equations:

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

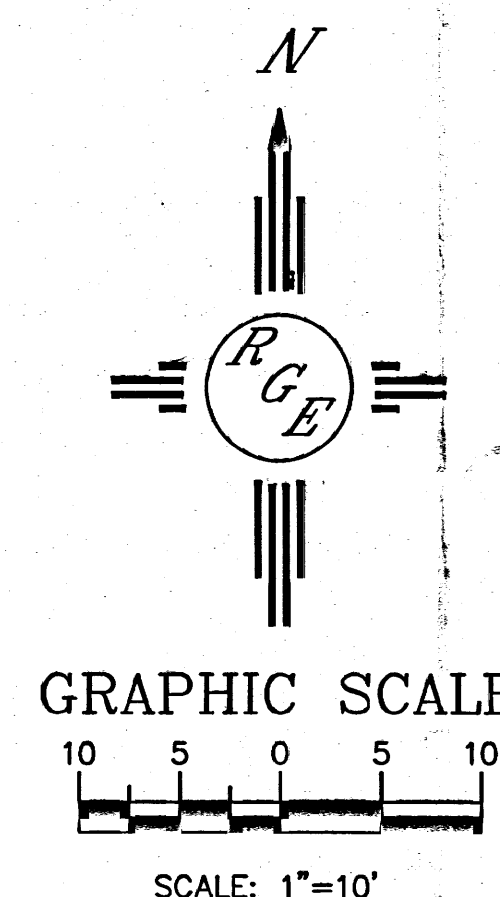
$$\text{Flow} = Q_a \cdot A_a + Q_b \cdot A_b + Q_c \cdot A_c + Q_d \cdot A_d$$

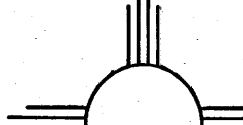
Qa= 1.57
Qb= 2.28
Qc= 3.14
Qd= 4.7

RETAIN ALL ALLEY FLOW 530 CF

THIS IS A REDEVELOPMENT OF AN INFILL LOT. THIS LOT WAS FULLY DEVELOPED IN THE PAST DUE TO THE LIMITED SITE AREA. WE ARE PROPOSING TO POND THE ENTIRE 100-YEAR VOLUME DISCHARGING TO THE ALLEY AND ALLOWING THE FREE FLOW OF THE IRON BASIN. IN A 6-HOUR EVENT THE SITE WILL DISCHARGE 23 CFS WHEREAS IT IS ALLOWED TO DRAIN 45 CFS. IN A LONGER STORM EVENT THE POND MAY NOT BE COMPLETELY DRAINED. THE POND WILL DISCHARGE AND THE SITE MAY DISCHARGE UP TO 23 CFS IN EXCESS OF ALLOWED. THE SITE BEING INFILL AND THE POTENTIAL FOR INFILTRATION AND ATTENUATION DO TO PONDING, THE EFFECTIVE DISCHARGE RATE SHALL BE LESS THAN THE 68 CFS CALCULATED.

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



ENGINEER'S SEAL  11/22/16	1203 IRON DUPLX	DRAWN BY WCVJ
	GRADING AND DRAINAGE PLAN	DATE 11-02-16
		21637-LAYOUT-11-02-16
	<i>Rio Grande Engineering</i> 1806 CENTRAL AVENUE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0999	SHEET # -
		JOB # 21637
DAVID SOULE P.E. #14522		