CITY OF ALBUQUERQUE

September 17, 2015

David Soule, PE
Rio Grande Engineering
1606 Central SE Suite 201
Albuquerque, NM 87106

Re: Kirkpatrick
8610 President Place
Request Permanent C.O. - Accepted
Engineer's Stamp dated: 2-5-15 (C17D122)
Certification dated: 9-14-15

Dear Mr. Soule,

Based on the Certification received 9/15/2015, the site is acceptable for release of Certificate of Occupancy by Hydrology.

If you have any questions, you can contact me at 924-3695 or Totten Elliott at 924-3982.

Sincerely,

Rita Harmon, P.E.,
Senior Engineer, Hydrology
Planning Department

TE/RH
C: email

PO Box 1293
Albuquerque
New Mexico 87103
www.cabq.gov

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: kirkpatrick Building Permit #: _____ City Drainage #: c17d122

DRB#: _____ EPC#: _____ Work Order#: _____

Legal Description: B1A5 CLIFFORD INDUSTRIAL PARK

City Address: 8610 presidents place

Engineering Firm: RIO GRANDE ENGINEERING Contact: DAVID SOULE

Address: PO BOX 93924, ALBUQUERQUE, NM 87199

Phone#: 505.321.9099 Fax#: 505.872.0999 E-mail: DAVID@RIOGRANDEENGINEERING.COM

Owner: KIRKPATRICK COMPANY Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Architect: DAN HERR Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Surveyor: CONSTRUCTION SURVEY INCORPORATED Contact: JOHN GALLEGOS

Address: _____

Phone#: 917.8921 Fax#: _____ E-mail: _____

Contractor: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

TYPE OF SUBMITTAL:

- ____ DRAINAGE REPORT
- ____ DRAINAGE PLAN 1st SUBMITTAL
- ____ DRAINAGE PLAN RESUBMITTAL
- ____ CONCEPTUAL G & D PLAN
- ____ GRADING PLAN
- ____ EROSION & SEDIMENT CONTROL PLAN (ESC)
- x ENGINEER'S CERT (HYDROLOGY)
- ____ CLOMR/LOMR
- ____ TRAFFIC CIRCULATION LAYOUT (TCL)
- ____ ENGINEER'S CERT (TCL)
- ____ ENGINEER'S CERT (DRB SITE PLAN)
- ____ ENGINEER'S CERT (ESC)
- ____ SO-19
- ____ OTHER (SPECIFY)

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ____ SIA/FINANCIAL GUARANTEE RELEASE
- ____ PRELIMINARY PLAT APPROVAL
- ____ S. DEV. PLAN FOR SUB'D APPROVAL
- ____ S. DEV. FOR BLDG. PERMIT APPROVAL
- ____ SECTOR PLAN APPROVAL
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- x CERTIFICATE OF OCCUPANCY (PERM)
- ____ CERTIFICATE OF OCCUPANCY (TCL TEMP)
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- ____ SO-19 APPROVAL
- ____ ESC PERMIT APPROVAL
- ____ ESC CERT. ACCEPTANCE
- ____ OTHER (SPECIFY)

WAS A PRE-DESIGN CONFERENCE ATTENDED: ____ Yes X No ____ Copy Provided

DATE SUBMITTED: 9/14/15 By: _____

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 followin

1. **Conceptual Grading and Drainage Plan**: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans
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4. **Erosion and Sediment Control Plan:** Required for any new development and redevelopment site with 1-acre or more of land disturbing area, including project less than 1-acre than are part of a larger common plan of development

Weighted E Method
KIRKPATRICK

Existing Developed Basins

Basin	Area	Area	Treatment A		Treatment B		Treatment C		Treatment D		100-Year, 6-hr			10-day
	(sf)	(acres)	%	(acres)	%	(acres)	%	(acres)	%	(acres)	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Volume (ac-ft)
BASIN A	16304	0.374	0%	0	8.0%	0.030	6.0%	0.02246	86%	0.322	1.953	0.061	1.65	0.104
BASIN B	24640	0.566	0%	0	13.0%	0.074	31.0%	0.17535	54%	0.305	1.597	0.075	2.15	0.115
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TOTAL	43560	1.000	0%	0		0.108		0.243	45%	0.638		0.143	4.007	#VALUE!

Equations:

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

Volume = Weighted D * Total Area

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

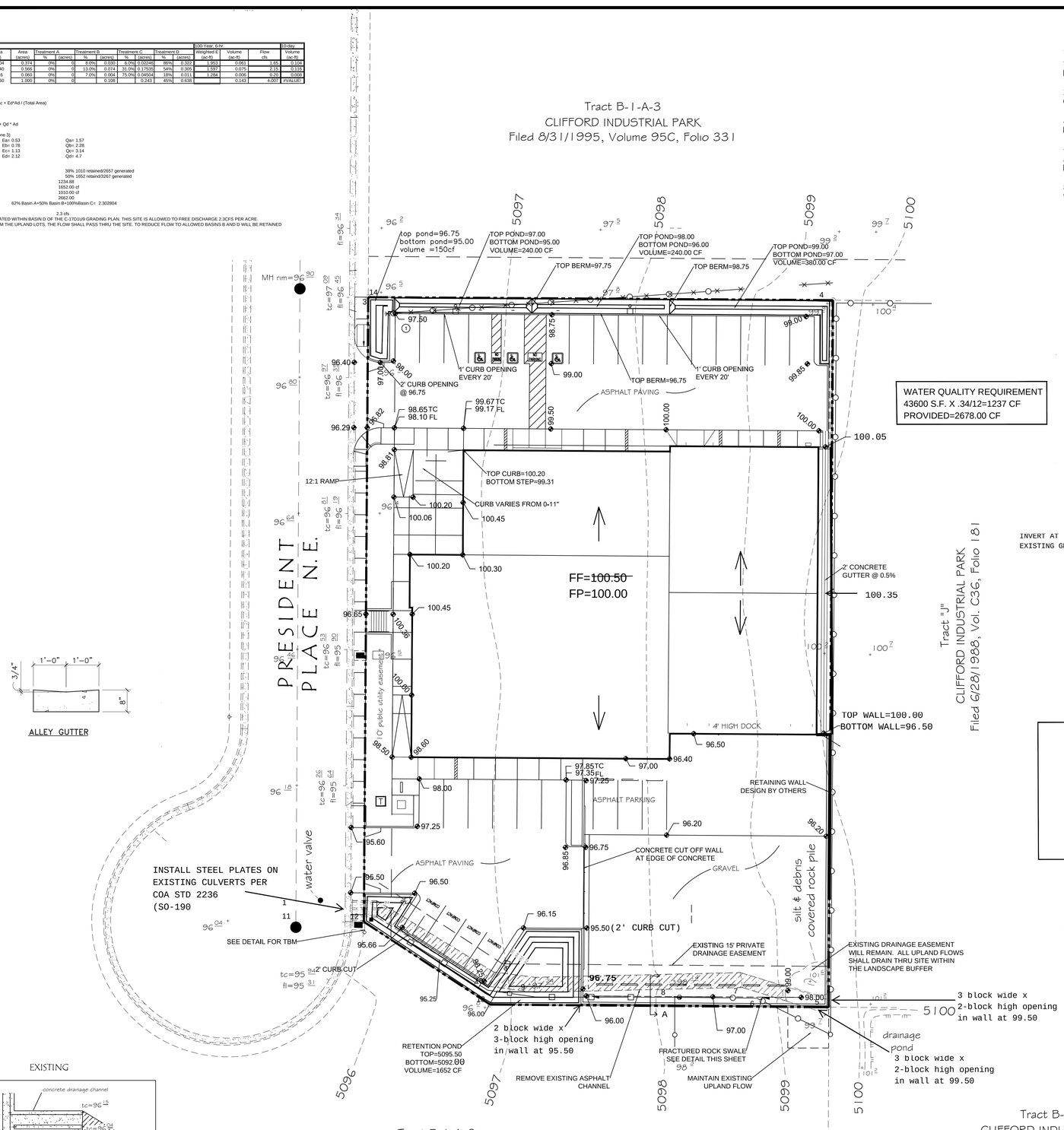
Where for 100-year, 6-hour storm (zone 3)

Ea= 0.53 Qa= 1.57
Eb= 0.78 Qb= 2.28
Ec= 1.13 Qc= 3.14
Ed= 2.12 Qd= 4.7

Reduction of discharge
basin a 38% 1010 retained/2657 generated
basin b 50% 1652 retaind/3267 generated
water quality requirement 1234.88
Pond basin B 1652.00 cf
Pond basin A 1010.00 cf
Total retained 2662.00
Theoretical discharge 62% Basin A+50% Basin B+100%Basin C= 2.302804

allowed discharge 2.3 cfs
THE SUBJECT PROPERTY IS LOCATED WITHIN BASIN D OF THE C-17D1U9 GRADING PLAN. THIS SITE IS ALLOWED TO FREE DISCHARGE 2.3CFS PER ACRE.
THE SITE ACCEPTS 12.9 CFS FROM THE UPLAND LOTS. THE FLOW SHALL PASS THRU THE SITE TO REDUCE FLOW TO ALLOWED BASINS B AND D WILL BE RETAINED

Tract B-1-A-3
CLIFFORD INDUSTRIAL PARK
Filed 8/31/1995, Volume 95C, Folio 331



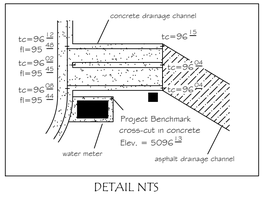
WATER QUALITY REQUIREMENT
43600 S.F. X .34/12=1237 CF
PROVIDED=2678.00 CF

Tract "J"
CLIFFORD INDUSTRIAL PARK
Filed 6/28/1988, Vol. C36, Folio 181

Tract B-1-A-7
CLIFFORD INDUSTRIAL PARK
Filed 8/31/1995, Volume 95C, Folio 331

ALLEY GUTTER

EXISTING



DETAIL NTS

Elevations shown hereon are NAVD88 values. Project Benchmark is a cross-cut in concrete at the southwest corner of Tract B-1-A-5, elevation = 5096.13 feet. Provided by Chnstopher J. Dehler, NMLS 7923

Tract B-1-A-6
CLIFFORD INDUSTRIAL PARK
Filed 8/31/1995, Volume 95C, Folio 331

EROSION CONTROL NOTES:

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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 (CITY) ACCEPTANCE OF ANY PROJECT.

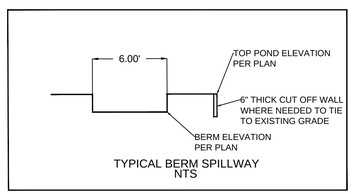
PRIVATE DRAINAGE IMPROVEMNET IN PUBLIC ROW
NOTICE TO CONTRACTORS

Notice to Contractor
(Special Order 19 ~ "SO-19")

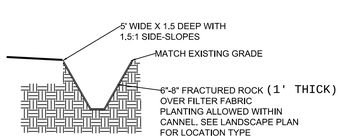
1. An excavation permit will be required before beginning any work within City Right-Of-Way.
2. All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
3. Two working days prior to any excavation, the contractor must contact New Mexico One Call, dial "811" [or (505) 260-1990] for the location of existing utilities.
4. Prior to construction, the contractor shall excavate and verify the locations of all 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 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.
8. Prior to pouring concrete, contractor shall notify the storm drain inspector, 857-8074, to inspect reinforcement.

APPROVAL	NAME	DATE
INSPECTOR		

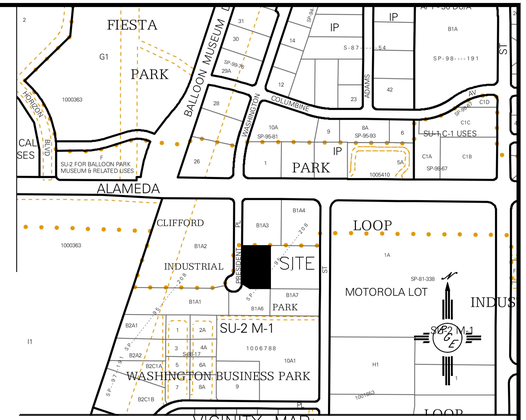
WALL OPENING DETAIL



TYPICAL BERM SPILLWAY
NTS



SECTION A-A



LEGAL DESCRIPTION:

Tract B-1-A-5, Clifford Industrial Park

NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. TOPOGRAPHIC SURVEY INFORMATION SHOWN ON THIS PLAN WAS OBTAINED BY Christopher J. Dehler, NMLS 7923
3. ONSITE CURB SHALL BE 6" UNLESS OTHERWISE NOTED
4. ALL POND SHALL BE LINED WITH 6-8" FRACTURED ROCK. LANDSCAPING SHALL BE INSTALLED WITHIN ROCK.

LEGEND

- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- PROPOSED CONTOUR
- PROPOSED INDEX CONTOUR
- DESIGN ELEVATION

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 DAVID ACOSTA NMPS 21082. The certification is submitted in support of a request for PERMANENT CERTIFICATE OF OCCUPANCY. 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.

DAVID SOULE NEW MEXICO 14522 REGISTERED PROFESSIONAL ENGINEER

9/14/15

GRAPHIC SCALE
20 10 0 10 20
SCALE: 1"=20'

ENGINEER'S SEAL
DAVID SOULE NEW MEXICO 14522 REGISTERED PROFESSIONAL ENGINEER
2/5/15
DAVID SOULE
P.E. #14522

TRACT B-1-A-5
CLIFFORD INDUSTRIAL PARK

GRADING AND DRAINAGE PLAN

Rio Grande Engineering
1606 CENTRAL AVENUE SE
SUITE 201
ALBUQUERQUE, NM 87106
(505) 872-0999

DRAWN BY JDG
DATE 01-12-2015
SHEET # 1 OF 1
JOB #

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

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DRB#: _____ EPC#: _____ Work Order#: _____

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City Address: 8610 presidents place

Engineering Firm: RIO GRANDE ENGINEERING Contact: DAVID SOULE

Address: PO BOX 93924, ALBUQUERQUE, NM 87199

Phone#: 505.321.9099 Fax#: 505.872.0999 E-mail: DAVID@RIOGRANDEENGINEERING.COM

Owner: KIRKPATRICK COMPANY Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Architect: DAN HERR Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Surveyor: CONSTRUCTION SURVEY INCORPORATED Contact: JOHN GALLEGOS

Address: _____

Phone#: 917.8921 Fax#: _____ E-mail: _____

Contractor: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

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DATE SUBMITTED: 1/13/15 By: _____

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January 13, 2015

Ms. Amy Niese
Senior Engineer
Hydrology Department
Public Works Department
City of Albuquerque

RE: Revised Grading Plan (C-17D122)
Kirkpatrick Warehouse
Albuquerque, New Mexico

Dear Ms. Niese:

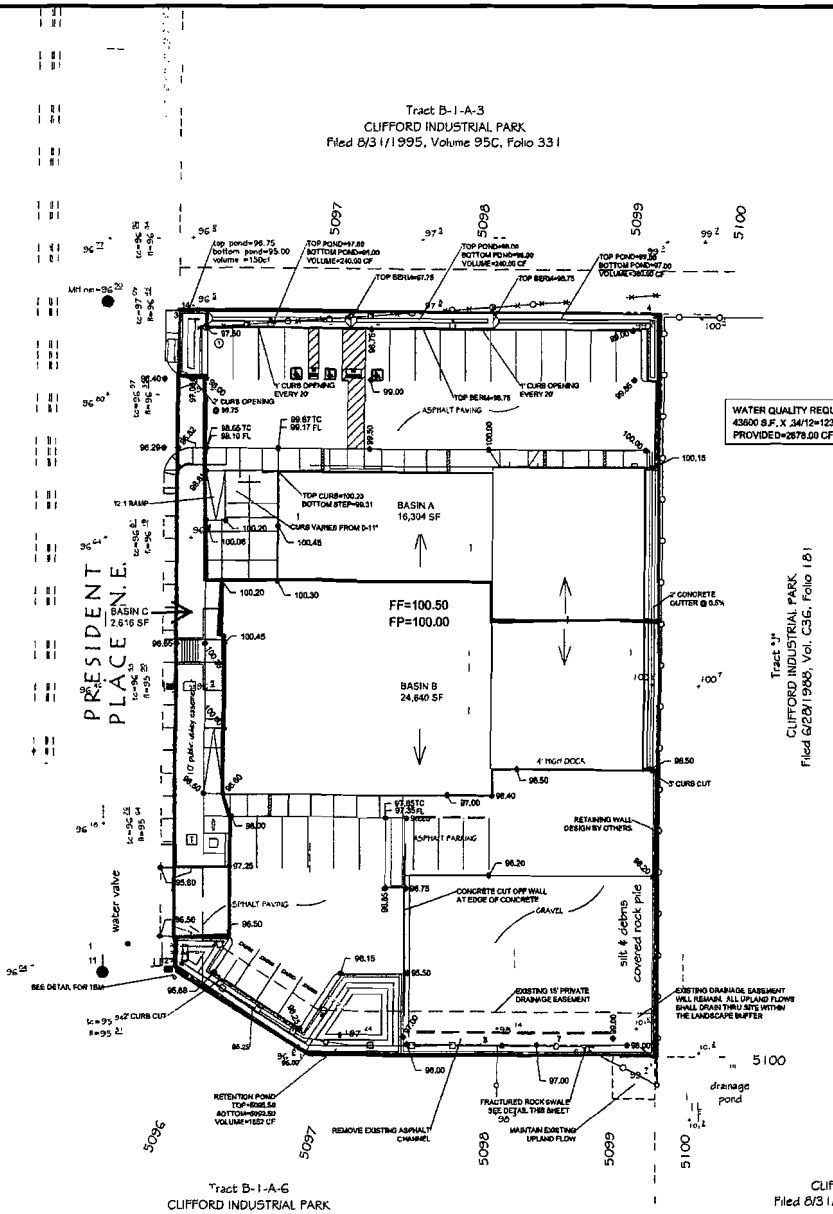
The purpose of this letter is to accompany the enclosed revised grading plan. The plan has been revised to accommodate your email comments dated 1/9/15. We have chosen to forgo the Stormtech chambers in favor of a more standard ponding method. The attached plan shows the site has 3 basins. One small basin free discharges and the other two pass thru retention ponds prior to discharging. Since portions of the basin are captured by the ponds, there will be an attenuation of the peak flow. I submit that the reduction in flow rate is directly related to the ratio of total flow leaving the site compared to the total generated flow. There for Basin A retains 38% of the flow it generates therefore the peak discharge is reduced by the same 38%. This methodology is consistent with what Bernalillo County uses to calculate the attenuated peaks using retention ponds. We have preliminarily used infiltration rates from published USDA soil maps. Many Municipalities around the state allow this method. We have ordered a percolation test to confirm but would like to have plan reviewed and if acceptable have approval pending the submittal of the test. The soil type is Wink-Embudo complex with minimum 2" per hour, therefore the 3' pond will discharge in 18 hours.

Should you have any questions regarding this matter, please do not hesitate to call me.

Sincerely,

David Soule, PE
RIO GRANDE ENGINEERING
PO Box 93924
ALBUQUERQUE, NM 87199
321-9099

BASIN MAP



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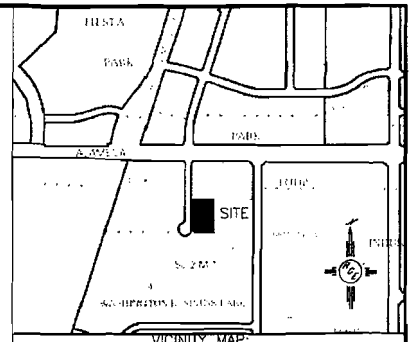

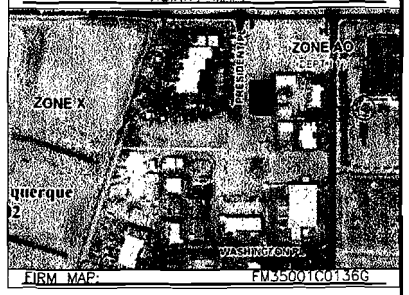

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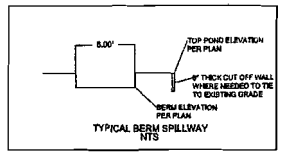

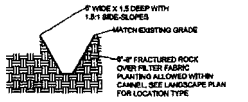

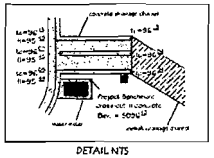

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20 10 0 10 20

SCALE: 1"=20'

ENGINEER'S SEAL	TRACT B-1-A-5 CLIFFORD INDUSTRIAL PARK	DRAWN BY JDG
	GRADING AND DRAINAGE PLAN	DATE 01-12-2015
DAVID SOULE P.E. #14522	Rio Grande Engineering 1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 873-0999	SHEET # 1 OF 1
		JOB #

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KIRKPATRICK

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USDA United States Department of Agriculture
Natural Resources Conservation Service

Web Soil Survey

Download Soils Data | Shopping Cart (Free)

Printable Version | Add to Shopping Cart

Printable Version

— Map Unit Description

alillo County and Parts of Sandoval and Valencia Counties, w Mexico

B—Wink-Embudo complex, 0 to 5 percent slopes

lap Unit Setting

National map unit symbol: 1vz3
Elevation: 4,850 to 6,500 feet
Mean annual precipitation: 7 to 10 inches
Mean annual air temperature: 58 to 60 degrees F
Frost-free period: 170 to 195 days
Farmland classification: Not prime farmland

lap Unit Composition

Wink and similar soils: 65 percent
Embudo and similar soils: 25 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

escription of Wink

Setting

Landform: Alluvial fans, fan piedmonts
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous and sedimentary rock

Typical profile

H1 - 0 to 6 inches: fine sandy loam
H2 - 6 to 60 inches: sandy loam

Properties and qualities

Slope: 1 to 5 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 10 percent
Gypsum, maximum in profile: 2 percent
Salinity, maximum in profile: Nonsaline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 2.0
Available water storage in profile: Moderate (about 7.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: Loamy (R042XA052NM)

escription of Embudo

Setting

Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Alluvium derived from igneous and sedimentary rock

Typical profile

H1 - 0 to 4 inches: gravelly fine sandy loam
H2 - 4 to 20 inches: gravelly sandy loam
H3 - 20 to 60 inches: stratified very gravelly loamy coarse sand to extremely gravelly loamy sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum in profile: 5 percent
Salinity, maximum in profile: Nonsaline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 2.0
Available water storage in profile: Low (about 3.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Scale (not to scale)

ng: Soil Map may not be valid at this scale.

zoomed in beyond the scale at which the soil map for this area is intended to be used. M
scale. The soil surveys that comprise your AOI were mapped at 1:24,000. The design of
own in the resulting soil map are dependent on that map scale.

ent of maps beyond the scale of mapping can cause misunderstanding of the detail of ma
t. The maps do not show the small areas of contrasting soils that could have been shown

scrimination Statement | Information Quality | USA.gov | White House

opening in wall

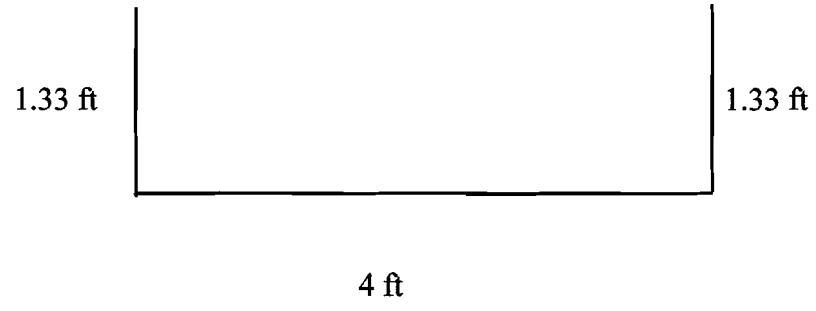
Weir Equation:

$$Q=CLH^{3/2}$$

Q= 13. cfs
C = 2.95
H = 0.67 ft
L = Length of weir

$$L = \frac{12.9}{2.95(1.33)^{3/2}}$$

L = 2.85 ft
Use 4' to match 3 blocks wide



Channel Capacity

	Top Width (ft)	Bottom Width (ft)	Depth (ft)	Area (ft^2)	WP (ft)	R	Slope (%)	Q Provided (cfs)	Q Required (cfs)	Velocity (ft/s)
Beginning	6	0.1	1.5	4.58	6.72	0.6809138	2	24.87	13.00	2.84

Manning's Equation:

Q = 1.49/n * A * R^(2/3) * S^(1/2)

A = Area

R = D/4

S = Slope

n = 0.03

David Soule

From: Niese, Amy [AmyNiese@cabq.gov]
Sent: Friday, January 09, 2015 12:02 PM
To: David Soule (david@riograndeengineering.com)
Subject: Kirkpatrick C17D122

You made the corrections I requested on the plans.

In talking with Curtis, we can only accept a volume in the rock voids of 30% not 40% that Stormtech uses. The number of units would have to be increased accordingly.

The Stormtech units can be used for retention for the First Flush. However, they cannot be used for infiltration because the DPM does not allow for infiltration at this time.

Because of these reasons, I cannot approve the Kirkpatrick plans until these issues are resolved.

I will discuss this more with you on Monday.

Amy L. D. Niese, P.E.
Senior Engineer, Hydrology
Planning Department
Development & Building Services Division
(505) 924-3994

Weighted E Method
KIRKPATRICK

Existing Developed Basins

Basin	Area	Area	Treatment A		Treatment B		Treatment C		Treatment D		100-Year, 6-hr			10-day
	(sf)	(acres)	%	(acres)	%	(acres)	%	(acres)	%	(acres)	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Volume (ac-ft)
BASIN A	16304	0.374	0%	0	8.0%	0.030	6.0%	0.02246	86%	0.322	1.953	0.061	1.65	0.104
BASIN B	24640	0.566	0%	0	13.0%	0.074	31.0%	0.17535	54%	0.305	1.597	0.075	2.15	0.115
BASIN C	2616	0.060	0%	0	7.0%	0.004	75.0%	0.04504	18%	0.011	1.284	0.006	0.20	0.008
TOTAL	43560	1.000	0%	0		0.108		0.243	45%	0.638		0.143	4.007	#VALUE!

Equations:

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

Volume = Weighted D * Total Area

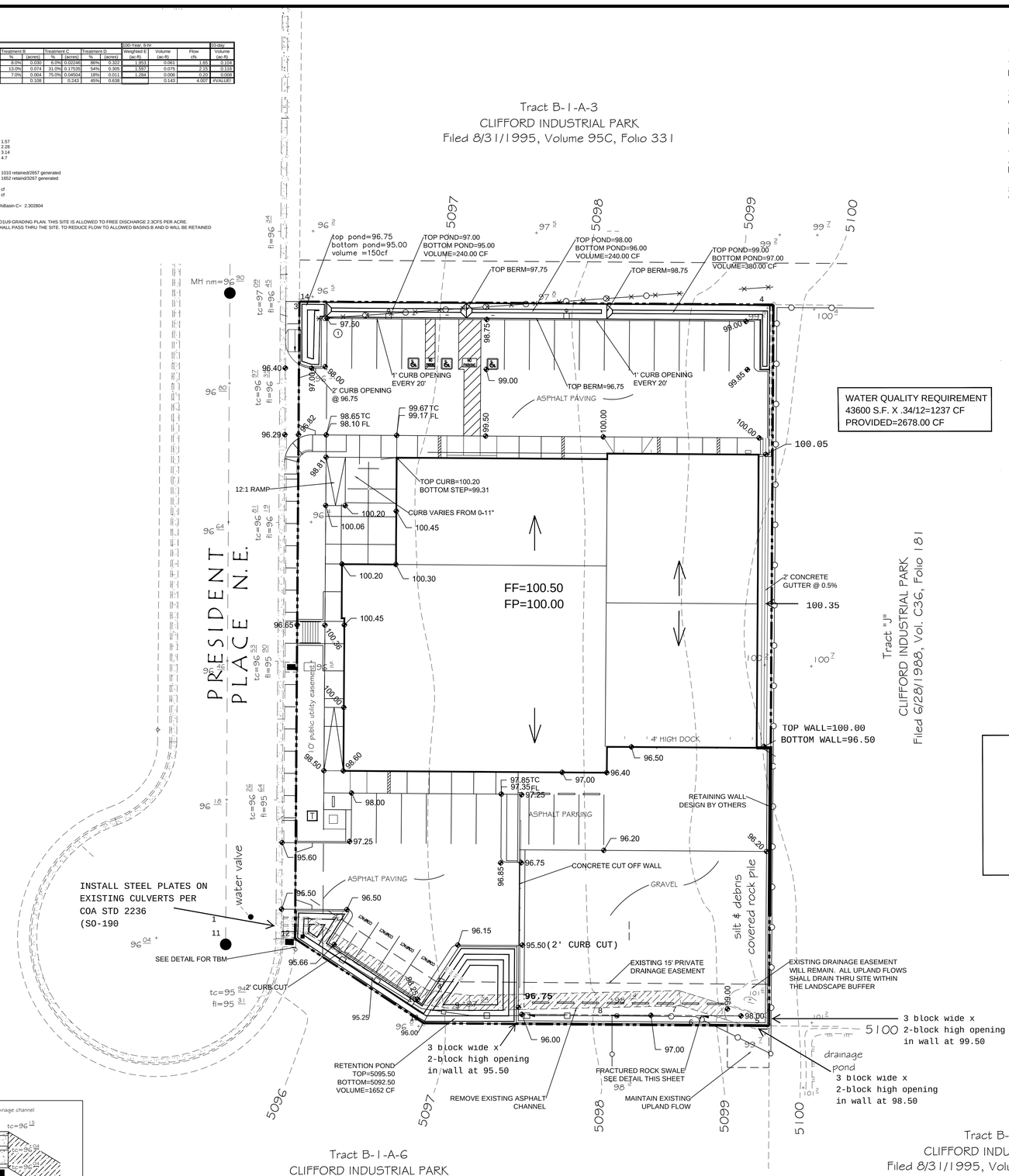
Flow = Qa * Aa + Qb * Ab + Qc * Ac + Qd * Ad

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

Ea= 0.53 Qa= 1.57
Eb= 0.78 Qb= 2.28
Ec= 1.13 Qc= 3.14
Ed= 2.12 Qd= 4.7

Reduction of discharge
basin a 38% 1010 retained/2657 generated
basin b 50% 1652 retaind/3287 generated
water quality requirement 1234.88
Pond basin B 1652.00 cf
Pond basin A 1010.00 cf
Total retained 2662.00
Theoretical discharge 62% Basin A+50% Basin B+100%Basin C= 2.302804

allowed discharge 2.3 cfs
THE SUBJECT PROPERTY IS LOCATED WITHIN BASIN D OF THE C-17D1U9 GRADING PLAN. THIS SITE IS ALLOWED TO FREE DISCHARGE 2.3CFS PER ACRE.
THE SITE ACCEPTS 12.9 CFS FROM THE UPLAND LOTS. THE FLOW SHALL PASS THRU THE SITE TO REDUCE FLOW TO ALLOWED BASINS B AND D WILL BE RETAINED

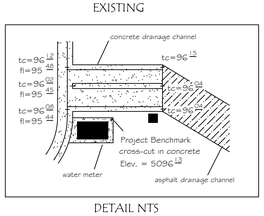


WATER QUALITY REQUIREMENT
43600 S.F. X .34/12=1237 CF
PROVIDED=2678.00 CF

Tract "J"
CLIFFORD INDUSTRIAL PARK
Filed 6/28/1988, Vol. C36, Folio 181

Tract B-1-A-6
CLIFFORD INDUSTRIAL PARK
Filed 8/31/1995, Volume 95C, Folio 331

Tract B-1-A-7
CLIFFORD INDUSTRIAL PARK
Filed 8/31/1995, Volume 95C, Folio 331



DETAIL NTS

Elevations shown hereon are NAVD88 values. Project Benchmark is a cross-cut in concrete at the southwest corner of Tract B-1-A-5, elevation = 5096.13 feet. Provided by Chnstopher J. Dehler, NMLS 7923

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 (CITY) ACCEPTANCE OF ANY PROJECT.

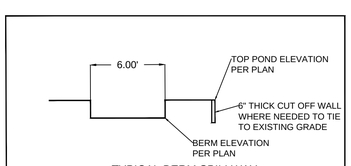
PRIVATE DRAINAGE IMPROVEMNET IN PUBLIC ROW
NOTICE TO CONTRACTORS

Notice to Contractor
(Special Order 19 ~ "SO-19")

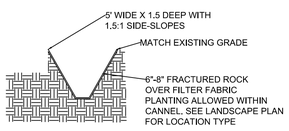
1. An excavation permit will be required before beginning any work within City Right-Of-Way.
2. All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
3. Two working days prior to any excavation, the contractor must contact New Mexico One Call, dial "811" [or (505) 260-1990] for the location of existing utilities.
4. Prior to construction, the contractor shall excavate and verify the locations of all 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 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.
8. Prior to pouring concrete, contractor shall notify the storm drain inspector, 857-8074, to inspect reinforcement.

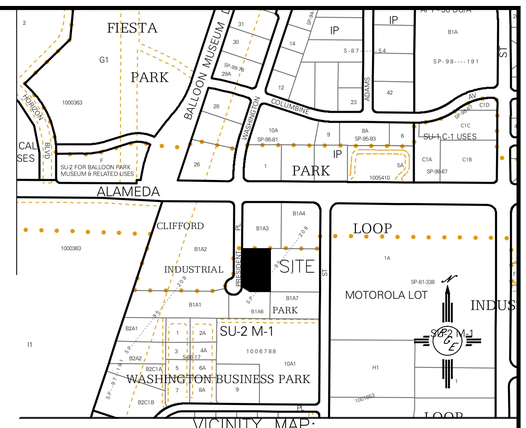
APPROVAL	NAME	DATE
INSPECTOR		

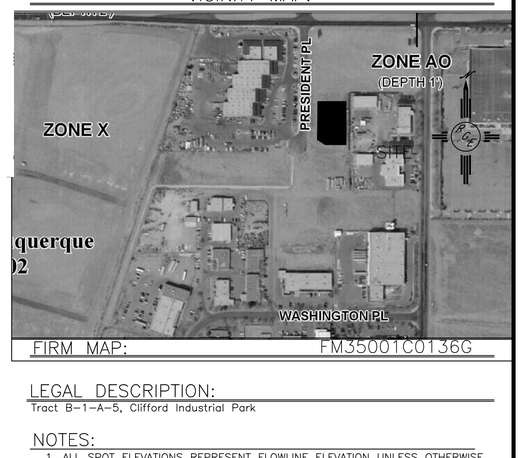
ALLEY GUTTER



TYPICAL BERM SPILLWAY
NTS







LEGAL DESCRIPTION:

Tract B-1-A-5, Clifford Industrial Park

NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. TOPOGRAPHIC SURVEY INFORMATION SHOWN ON THIS PLAN WAS OBTAINED BY Christopher J. Dehler, NMLS 7923
3. ONSITE CURB SHALL BE 6" UNLESS OTHERWISE NOTED
4. ALL POND SHALL BE LINED WITH 6-8" FRACTURED ROCK. LANDSCAPING SHALL BE INSTALLED WITHIN ROCK.

LEGEND

- 5411 EXISTING CONTOUR
- 5410 EXISTING INDEX CONTOUR
- 5411 PROPOSED CONTOUR
- 5410 PROPOSED INDEX CONTOUR
- DESIGN ELEVATION

GRAPHIC SCALE
20 10 0 10 20
SCALE: 1"=20'

ENGINEER'S SEAL
DAVID SOULE NEW MEXICO 14522 REGISTERED PROFESSIONAL ENGINEER
1/13/15
DAVID SOULE P.E. #14522

TRACT B-1-A-5
CLIFFORD INDUSTRIAL PARK

GRADING AND DRAINAGE PLAN

Rio Grande Engineering
1606 CENTRAL AVENUE SE
SUITE 201
ALBUQUERQUE, NM 87106
(505) 872-0999

DRAWN BY JDG
DATE 01-12-2015
SHEET # 1 OF 1
JOB #